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The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

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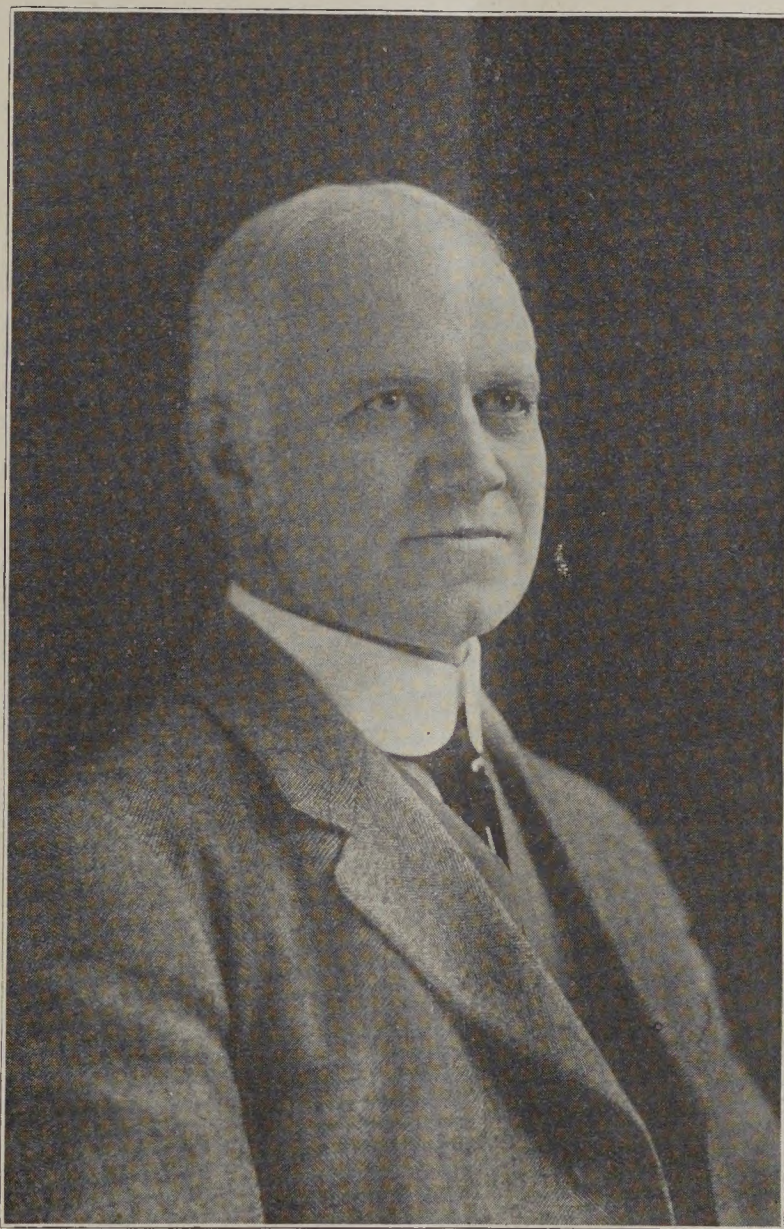
ROCHESTER, N. Y., JANUARY, 1912

No. 1

NORTHERN NUT GROWERS CONVENE AT CORNELL

A Live Meeting. Large Exhibition. Important Resolutions.

The second annual meeting of this Association of men interested in the promotion of nut culture in the Northeast was held at the New York State College of Agriculture at Cornell University, December 14 and 15. Not in the recollection of the writer has he attended a meeting of any body of men interested in crop production where discussion flowed so easily and pointedly, and where every member seemed charged with a special mission on behalf of nut culture and the extension of the nut industry. Every session was replete with subject matter derived from papers or developing in the subsequent discussion of prime interest to those directly or indirectly affected by the production of fruit and fruit products. The leading students of our native nut flora were present. Men like Dr. Robert T. Morris, Dr. W. C. Deming, of New York City, Mr. T. P. Littlepage of Washington, Mr. J. G. Rush of West Willow, Pennsylvania, Mr. W. N. Roper of Petersburg, Virginia, Professors Lake and Reed of Washington, Professor Collins of Pennsylvania, and others, gave of their best information, gathered from years of experience, for the benefit of those presently involved or only engaged in anticipation in the many-sided field of nut culture.



DR. ROBERT T. MORRIS
President Northern Nut Growers

IMPORTANT RESOLUTIONS

The society placed itself strongly on record in respect to the importance of comprehensive, systematic, well directed legislative effort, looking towards the control or prevention of the chestnut bark disease. Strong resolutions on this

subject were passed to be forwarded to the departments of agriculture of the northeastern states and the United States Secretary of Agriculture. Similar action was taken with reference to the hickory bark beetle, which has been causing so much loss in the hickory growing regions of the Northeast in recent years. Especially virulent outbreaks have been recorded from Pennsylvania and eastern New York in recent months. In the case of New York State, and due to the comprehensive insect and disease control act in force in the State, the Society urged the Commissioner of Agriculture to include this insect among the list of those deemed especially dangerous and calling for definite restrictive measures aiming for control.

The chestnut bark disease was treated very fully by Mr. J. Franklin Collins, special agent of the Pennsylvania Department of Agriculture, and Doctor Reddick of the New York State College of Agriculture. The hickory bark beetle was dis-

cussed by Professor Herrick of the Department of Entomology of Cornell, who called attention to the grave possibility that this insect might spread to the cultivated forms of the hickory.

PAPERS AND DISCUSSIONS

Among the important papers presented, was an exceedingly suggestive one by Mr. T. P. Littlepage of Washington, who has extensive pecan interests in southern Indiana, and who for the past several years has been exploring the bottoms of the Wabash and the Ohio for promising seedling

varieties of this splendid type of the hickory. Mr. Littlepage proved quite conclusively by his extensive explorations and by the submission of convincing specimens of fruit gathered from native trees, that there were many seedling varieties highly meritorious and worthy of propagation. Most of these varieties were well filled, of good size, though not approximating the largest of the southern nuts, of excellent flavor, and possessing fine cracking qualities. This latter characteristic is of great importance, considered from the commercial standpoint. Mr. Littlepage's paper left a distinct impression that pecan culture was not to be confined in the future to the cotton growing states, but that regions in the North where the thermometer did not register below the ten below zero mark were suitable for the cultivation of this splendid native nut.

PROPAGATION

The subject of the propagation of the hickories, pecans, and walnuts was ably discussed by Mr. W. N. Roper, of Petersburg, Virginia. He considered this topic from the standpoint of northern experience, and showed clearly that methods considered satisfactory and usually successful in the South might not necessarily prove feasible or desirable in the North. The common commercial method of propagating pecans by grafting on the root of the established seedling had not been successful with him, and he was now placing most reliance upon budding by the Patch method at a height of from two to three feet above the ground.

President Morris's address devoted considerable attention to the different strains of the hickories. He has been making a specialty of this group of nuts, for the purpose of studying characteristics of tree, blossom, and fruit. He has also paid very considerable attention to the subject of methods of propagation. His address, which will be published in full in the transactions of the society, was full of valuable facts, hints, and suggestions. Many other interesting papers, including an illustrated address on the Persian walnut by Professor Lake, a general review of the present condition of nut culture in the northeast states by Mr. C. A. Reed, nut expert of the Department of Agriculture, nut growing promotions, Dr. W. C. Deming, were presented, and will appear in the printed report. The membership of the society is increasing, and interest generally widening.

The report of Secretary Deming recorded the history of the society and contained many suggestions for the future.

Standing committees on nomenclature, on worthy native seedlings, on membership, were appointed to present reports on the special topics assigned to them at the next meeting.

EXHIBITS

Exhibits were of two kinds: First, those nuts which were entered in competition for the Morris prizes awarded for valuable new seedlings of native nuts, except chestnuts,

and including Persian walnuts. This competition brought out a large number of entries and the display of shellbarks, shag barks, black walnuts, Persian walnuts, hazels, chinquapins, and the like, was very extensive. The judges, Messrs. C. A. Reed, Professor Lake, and Dr. Morris, had an exceedingly difficult task to select from the large collection the best types. The following were the prize winners.

MORRIS PRIZES AWARDED AT THE NORTHERN NUT GROWERS' ASSOCIATION

1. *Hicoria ovata*—Plate II, first prize, Plate I, second prize, exhibited by Dr. W. C. Deming from Platt Farm. Keen competition in this class.

2. *Hicoria pecan*—Mantura, first prize, Dr. W. C. Deming, West Chester, N. Y. C. Major, second prize, T. P. Littlepage, Union Trust Building, Washington, D. C. (The Mantura and Major were scored very closely. The Mantura received 84.5 per cent, while the Major received 84 per cent. The Greenriver was third.)

3. *Hicoria laciniosa*—First and second prizes, C. N. Stem, Gabillasville, Md.

4. Persian Walnut—Nebo, first prize, J. G. Rush, West Willow, Pa. Holden, second prize, E. B. Holden, Hilton, N. Y.

5. Asiatic Walnut—*Juglans Sieboldiana*, first prize, J. G. Rush, West Willow, Pa. Only one exhibit.

6. Chinquapin—No. 2, first prize, J. G. Rush, West Willow, Pa. No. 1, second prize, J. G. Rush, West Willow, Pa. (Only three exhibits, others by Hungerford.)

7. Freak Nuts—Hickory No. 4, first prize, Lillie E. Johnson, Gowanda, N. Y.

8. Butternuts—First prize, Mrs. Albina Simonds, South Royalton, Vt. (Best in color of kernel and ease of cracking, although one exhibited by Grace Stayton, Emlenton, Pa., was larger.)

9. Beechnuts—First prize, Malcolm Newell, West Wardsboro, Vt. Second prize, William Davis, Rutland, Vt.

10. American Hazel—Only one exhibit; not considered worthy of prize.

11. Black Walnuts—First prize, J. J. Robinson, Lamont, Mich. Second prize, Dorothy McGrew, R. F. D. 6, Box 77, Kent, O.

The following were competitors for the Morris prizes:

Beryl B. Burrier, Harlem Springs, N. Y.; Mrs. Nettie D. Swope, Pineville, W. Va.; Lucina Bates, Painesville, O.; Newman Hungerford, Torrington, Conn.; Bartlett Sanford, Redding, Conn.; David Sharp, Columbus, N. J.; C. N. Stem, Gabillasville, Md.; Grace E. Staten, Emlenton, Pa.; Mrs. J. H. Craig, Hookersville, W. Va.; W. S. Chamberlin, Glastonbury, Conn.; Mrs. Ella Shove, Hammond, N. Y.; Wm. C. Davis, Rutland, Vt.; Lillie E. Johnson, Gowanda, N. Y.; Jessica Sage, Waterbury, Conn.; Mrs. Albina Simonds, South Royalton, Vt.; John F. Ryerson, New Milford, N. Y.; J. J. Robinson, Lamont, Mich.; N. T. Frame, Martinsburg, W. Va.; Jos. T. Thompson, Oneida, N. Y.; J. H. Burkett, Clyde, Tex.; E. E. Wylde, New City, N. Y.; Mrs. E. A. Butler, Lawrenceville, Pa.; O. E. Wadhams, Torrington, Conn.; Malcolm Newell, W. Wardsboro, Vt.; W. A. Smith, Clarkson, N. Y.; Miss Dorothy McGrew, Kent, Ohio; Mrs. Jos. L. Lovett, Emilie, Pa.; Clyde P. Warner, Walpack Center, N. J.; Sarah E. Pratt, S. Sudbury, Mass.; T. W. Crenan, Camden, N. Y.; E. B. Holden, Hilton, N. Y.; Adelbert L. Thomson, North Avon, N. Y.;



DR. W. C. DEMING
Secretary

S. R. Leonard, Middletown, N. Y.; Mrs. Arthur Gatchell, Shortsville, N. Y.; G. O. Williams, Ithaca, N. Y.; Harry P. Rockwell, Canton, Pa.; Louis M. Young, Ballston Lake, N. Y.; Bruce D. Weatherup, DeKalb Jet., N. Y.; Leland Newell, W. Wardsboro, Vt.

The second group of exhibits comprised those nuts not placed in the competition, but shown for their educational worth. Of these, the collections by Messrs. Pomeroy of Lockport, New York, J. G. Rush, West Willow, Pennsylvania, T. P. Littlepage, Washington, and Dr. W. C. Deming, were especially meritorious.

The following officers were elected: President, Dr. Robert T. Morris, New York; vice-president, Mr. T. P. Littlepage, Washington; secretary-treasurer, Dr. W. C.

Deming, Westchester, N. Y.; executive committee, C. A. Reed, Washington, D. C., W. N. Roper, Petersburg, Va., and John Craig, Ithaca, N. Y. One vice-president for each state represented in the membership of the Association was chosen, as follows: New York, A. C. Pomeroy, Lockport; Minnesota, Col. C. A. Van Duzee, St. Paul; Indiana, R. L. McCoy, Lake; Ohio, J. H. Dayton, Painesville; Pennsylvania, J. G. Rush, West Willow; Massachusetts, Bernard Holman, Stockbridge.

The society accepted an invitation from Mr. J. G. Rush to hold its next meeting at Lancaster, Pennsylvania. This ensures an instructive environment, and the members are already looking forward to excursions among the nut orchards of that region.

QUIZ COLUMN

LIVE QUESTIONS ASKED AND ANSWERED

Legislation, Literature, Injurious Parasites

1. What are the regulations governing shipments of nursery stock into Canada?

2. What is the duty?

ANSWER 1. "No nursery stock shall be imported that is infested with any of the following insect pests or diseases: San José scale, brown-tail moth, gipsy moth, woolly aphis, internal and external parasitic diseases of potato, branch canker, and blister rust of white pine. Nursery stock shall be imported only through the ports and during the periods mentioned: Vancouver, B. C., from Oct. 1 to May 1; Niagara Falls, Ont., from Oct. 1 to May 15; Winnipeg, Man., and St. John, N. B., from March 15 to May 15, and from Oct. 7 to Dec. 7; Windsor, Ont., and St. Johns, Que., from March 15 to May 15, and from Sept. 26 to Dec. 7.

Importations by mail shall be subjected to the same regulations. The port by which it is intended that the nursery stock shall enter shall be clearly stated on each package and notice of shipment must be sent to the Dominion Entomologist, Ottawa. European nursery stock and certain other classes of vegetation may in the case of certain ports be allowed to proceed and shall be inspected at point of destination, but must not be unpacked except in the presence of the inspector. Copies of the regulations governing the importation of nursery stock into Canada may be obtained from Dr. C. Gordon Hewitt, Dominion Entomologist, Ottawa, Canada, to whom all inquiries should be addressed.

2. The general duty on nursery stock n. o. p. is 20%.

APPLE FOR NAME

F. J. Schwan of Dansville, N. Y., sends apple for identification.

We regret to say that though we have made a careful examination of the specimen of apple sent under date of Nov. 7, and have kept it before us for reference for a con-

siderable length of time, we are unable to identify it. It is possible that this is one of the Arkansas apples introduced by the Stark Brothers some years ago.

EDITOR.

CARE OF TREES.

NATIVE FRUIT STOCKS

1. Please name a good book on care of trees.

2. Are the native crab and the native bird cherry of any use as fruit stocks?

ANSWER. 1. One of the best books on the care of trees is that by B. E. Fernow, published by the Henry Holt Co., of New York. This not only contains excellent directions for the surgical treatment of diseased trees, but covers the whole subject of pruning and the control of enemies. Another book by a professional tree doctor is "Tree Surgery," by John Davey, of the John Davey Company, Dayton, Ohio. This last volume treats the subject exclusively from the practical standpoint, while the first named volume deals with it from the technical and scientific, as well as the practical.

WILD CRAB AND WILD CHERRY SEEDS

2. We suppose that our correspondent has reference to the native wild crab of the Northeast, *Pyrus coronaria*. This tree is a dwarf form of the native crabapple of the country. The texture of the wood is very close grained, differing considerably from the apple seedlings imported from France, or grown in our own country from imported or home produced seed. We would expect that these crabs would have a dwarfing tendency on the scion. Probably its effect would be somewhat similar to the use of Doucin stocks. I have seen many apple trees topgrafted on this crab, and in every case the scion outgrew the stock, which is an indication that if budded or grafted near the ground, it would have a dwarfing tendency on the scion.

We are not quite sure what you mean by the wild cherry. We have several wild cherries in the country, the black wild, *Prunus cerotina*, the choke cherry, *Prunus Virginiana*, and the bird cherry, *Prunus Pennsylvanicum*. The first two mentioned are quite unsuitable for stocks. They represent widely diverging strains. The fruit is borne in a raceme instead of a cyme or cluster, as in the case of the cultivated cherry. The last species mentioned, the bird cherry, has been used as a stock for both sweet and sour cherries with some degrees of success. We have experimented with this ourselves, and apart from some practical difficulties in budding, we can say the stock works fairly well with sour as well as sweet cherries. Its principal value lies in its hardiness, and freedom from root killing when cherries are grown in cold localities. The stock in nursery row grows with great rapidity and must be budded quite late in the season. Otherwise, the rush of sap is so great that the buds are thrown out, and trees often become bound by the tie string to such an extent that they easily break off under the stress of wind. This stock has been used to some small extent in Nova Scotia, the Province of Quebec, and possibly in the Northwest states.

DESCRIPTIVE POMOLOGY

Please name the best books on describing fruits.

A. F., New York.

There are several works available at the present time to the person who desires to study varieties of fruits. If he is interested in apples, the best work, as well as the most recent is "The Apples of New York," in two volumes. While this has a local title, it covers the whole field, and includes practically all the apples grown in the United States. The descriptions are accurate, the half tones and the colored plates are also dependable. This work in two volumes was published by the New York Experiment Station at Geneva under state appropriation some four years ago, and was primarily intended for distribution among New York State fruit growers. A number of copies, however, got into the hands of book jobbers, and are now found on the shelves of second hand book dealers. The regular supply apportioned to the Experiment Station and the Department of Agriculture has long since been exhausted.

Among the older books and among the best, as well, is "American Pomology," by Warder. This work, by the late eminent John A. Warder of Ohio, is long since out of print, but copies may be picked up now and then in second hand book stores. It is a valuable work, but, of course, not strictly up-to-date. One other book which should be mentioned is Thomas's "Fruit Culturist." This covers the whole range of fruit growing, and includes, in addition to the description of varieties, cultural directions. A recent edition of this work has been published by H. S. Wood Company of New York. We should not overlook Downing's "Fruits and Fruit Trees of America," which, like Warder's is considerably out of date, but nevertheless, is a valuable work, if one can afford it. The last two books can be secured through second hand book dealers. One of the best of these is G. C. Stechert, New York City.

It is worth while to mention also that the catalogue of the American Pomological Society gives brief descriptions of all the leading varieties of fruits, with notes on their adaptation to particular parts of the country. This is available to all members of the Society.

YELLOW LOCUST FROM SEED

Is there profit in growing locust from seed? Describe the method of starting a plantation.

J. H., Pa.

A good deal of interest has manifested itself recently in the growing of locust and catalpa on the so-called waste or rougher lands of New York and New England. There is some confusion in the public mind as to what is meant by the common name locust. Some people think of the honey locust, the three-thorned locust, and others have in mind the yellow or black locust found so frequently about old farmsteads in New England and Eastern New York. The honey locust is essentially a park or ornamental tree. It has no special value from the timber standpoint. The black locust, sometimes called yellow locust, on the other hand, quite an upright growing tree, very much less thorny and with much smaller pods than the honey locust, is especially valuable on account of the durability of its wood. As fencepost or tie timber, it is greatly prized. The cultivation of the black locust, *Robinia pseudacacia* (false acacia), has been attempted in many places with varying success. The arch-enemy of this tree is a stem borer which attacks the young trees in the plantation, and either destroys them entire or causes such malformation of growth as to unfit them for timber purposes. The tree is rapid growing and tenacious of life. It is a question whether the borer can be satisfactorily combatted.

The question is often asked whether it is best to sow the seed of this locust directly on the ground where the trees are to grow, or whether the seedlings should be grown in nursery row and then transplanted. As a rule, the latter procedure is much wiser. Locust seed germinates irregularly and somewhat slowly. To obviate this, the seed may be scalded, or it may be soaked in warm water for two or three days. The scalding or soaking softens the outer coat, so that the seed will take up the soil moisture and germinate with reasonable regularity. The seed may be sown in drills far enough apart for horse cultivation, when the ground is warm in the spring. It should not be put into cold soil, especially after soaking; for under these conditions it is likely to rot. A covering of one to two inches is sufficient. If the soil is of good mellow texture and reasonably fertile, a growth of from 12 to 18 inches may be expected the first year. These seedlings may be transplanted to the field the following spring. If the ground is rough and impossible of culture, then some care must be given to the young plants to prevent them from being smothered by contending weeds. In order to secure a good ground cover, which will suppress weeds in as short a time as possible, and also for the purpose of stimulating straight stem growth, the trees should be set as near as four feet. In forest plantations where they are cultivated regularly for the first two or

three years, they are set four feet each way and the ground cultivated by horse power during the growing season. In a couple of years, the whole soil is shaded, the weeds suppressed, and the growth of the tree is, by reason of this close planting, directed upwards. As time goes on, the lateral branches are pruned off naturally, simply by the shutting off of light through the crowding of their fellows. This promotes straight, upright stem growth. Of course, under rough land conditions, much less uniformity in growth can be expected, because of inadequate cultivation, but this may be overcome to a considerable degree by handwork once or twice during the growing season. Whether locust culture would be a profitable undertaking on rough lands in New England or New York would be determined to a considerable degree by the activity of the locust borer, and also by the amount of attention which the planter of the tract would give it for the first three or four years. This is the critical time in the life of the plantation. After the trees became established and he suppressed the grass and weed growth, and, provided no serious borer attack occurred, it is altogether likely that land occupied in this way would give a larger dividend in fifteen years than by any other farming method that might be adopted.

The NATIONAL NURSERYMAN,

From whom can I get Sargent's "Manual of Trees of North America"?

ALLEN WHITED, Ohio.

Sargent's "Manual of the Trees of North America, exclusive of Mexico," is published by Houghton, Mifflin & Company, Boston. It may be obtained directly from the firm, or through any reliable book dealer. This is an excellent hand book. The only criticism which one may properly offer is that where certain scientific names have been changed, by the author, he has not given the original name as a synonym, and the reader is at a loss occasionally to know what form the author has reference to.

fruit and Plant Notes

SUNBURST ROSE

A rose exhibited by Charles H. Totty at the sixth annual convention of the National Association of Gardeners attracted much attention. It was a recently imported French variety, Sunburst, which has received several certificates of merit and a silver medal at exhibitions in this country.

SEEDLESS APPLES

A breeze from the Pacific Coast brings the intelligence that another seedless apple has appeared in that region. In this instance, the seedless specimens appeared on a tree which had been annually pruned back by the browsing of live stock. The owner is reported at latest advices as having packed his specimens in a grip and having started for Luther Burbank. He should be advised that Luther Burbank has troubles of his own.

THE LOGANBERRY

The cultivation of this fruit for commercial purposes has now passed beyond the experimental stage. Considerable breadths have been established in this country, and these yield remunerative returns. The fruit is principally used for bottling purposes, but by some it is greatly appreciated for dessert. For the latter purpose the fruits should be allowed to ripen thoroughly on the canes, and need very close watching. Land intended for planting with loganberries should be deep, even if strong, and the latter condition is by no means a drawback. From twenty to thirty loads of manure should be applied, and the land either bastard trenched or ploughed and sub-soiled. One-year-old plants should, if possible, be planted during the autumn. The rows are set eight feet apart, and the plants that distance asunder. In spring the canes should be cut back to within a few inches of the ground, to encourage the production of strong canes.

After the first year substantial trellises are necessary to train the canes to. To form these, drive stout posts into the ground at intervals of fifteen feet. They should stand six feet out of the ground, and have a length of two or three feet driven into the soil. All posts ought to be creosoted from the base to a point above the ground line. At intervals of every eighty yards extra stout straining posts must be erected, and be well strutted. Strong wires should then be fixed a foot apart, the upper one being near the top of the posts, and the bottom one a foot from the ground. Holes may be bored through the posts to carry the wires, or staples may be used for the purpose. In either case the wires must be left free, to enable them to be tightened from one end. Potatoes may with advantage be grown between the rows for the first year after planting. When the plants are established the growth should be confined to seven canes to each plant; one of these can be trained upright to the top of the trellis, and the others one to each wire.

The lowberry and the phenomenal-berry, both darker forms of the loganberry, are becoming popular in private gardens on account of their fruits being somewhat sweeter.

—*Journal of Horticulture.*

SHORT COURSE IN HORTICULTURE AT CORNELL

This course was established some five years ago and fifteen students were in attendance the first year. The number of students has increased regularly each year, until at the present time there are sixty-five students enrolled. This enrollment includes a number of college graduates. Among the colleges represented are Yale, Princeton, Harvard, Williams, Amherst, and the University of Michigan. These men, in addition to those directly from the farm, are preparing as rapidly as possible to take hold of some type of horticultural enterprise, either the growing of fruit, the growing of vegetables, or the growing of flowers. Special courses in vegetable culture and floriculture are also offered at Cornell this winter.

E. S. Sherrill, proprietor of Wolverine Co-operative Nurseries of Michigan, says: "I look forward with interest to the coming of THE NATIONAL NURSERYMAN."

THE FEDERAL INSPECTION BILL

Co-Operation Between Entomologists, Inspectors, Nurserymen and Fruit Growers

REPORT OF WM. PITKIN, Chairman Legislative Committee

It is a great pleasure to be able to announce, that after long delay and many attempts, the efforts of the nurserymen and the less radical of the entomologists to find common ground on which to build a satisfactory Federal Inspection Bill have been crowned with success. The NATIONAL NURSERYMAN has constantly maintained the principle that Federal Legislation could not be framed alone by one of the interested parties; that friendly co-operation was the only basis for effective legislation. The recent Washington conference, composed of reasonable men dictated by an earnest wish to solve the difficult problem, has succeeded. The participants in this conference are to be congratulated and fruit-growers generally to be felicitated on the promising outlook.

Mr. Pitkin generously credits Professor Hunter, Mr. Stark, and others, with valuable aid, but we should not forget that in Mr. Pitkin's case this is but the finale or last scene in a campaign lasting several years and involving a vast amount of labor and personal self-sacrifice. Mr. Pitkin has been ably assisted by Mr. Rouse. These men have given freely of their time and energy and absolutely without remuneration. They have richly earned the gratitude of their associates in the American Association of Nurserymen.—EDITOR.

To the Members of the American Association of Nurserymen:

Gentlemen:

I am very glad to be able to say to you that the prospects look very favorable today for a satisfactory settlement of the dispute relative to the proposed federal bills regulating the importation of nursery stock.

The National Association of Horticultural Inspectors and the Association of Entomologists held their annual convention in Washington during present week.

Your Chairman with Mr. Irving Rouse, Mr. W. P. Stark, and Mr. W. H. Wyman, had a number of conferences during Wednesday and Thursday with the Legislative Committee of the Inspectors' Association, and also with individual members, and with Dr. Howard and Mr. Marlatt of the Department of Agriculture, and a tentative agreement was reached subject to the approval of our Legislative Committee, and which I think will be secured.

The proposed bill will provide for permits, notifications, and both domestic and foreign quarantine, but the provisions for foreign and domestic quarantine will be limited to insects and diseases new to the United States, and not now established in this country.

The bill will also provide for an Administrative Board, and for public hearings before the issuance of any quarantine or stringent order, and with an opportunity for appeal from the decision of that Board to the Secretary of Agriculture.

A bill is to be drafted by the Department of Agriculture and submitted to your Legislative Committee before any further action is taken.

Your Committee felt that in view of the sentiment that had been aroused by the Department of Agriculture and the Entomologists in favor of some form of federal regulation, that it was wise to join with the Entomologists and Inspectors and agree on a compromise measure that would be a protection to the public and the fruit growers, and would not be extremely burdensome on the nursery interests; and it is our belief that this has been accomplished by the proposed bill.

Your Committee was very ably assisted by Prof. S. J. Hunter of the Kansas University, who came to Washington with Mr. Stark, representing the Western Wholesale Asso-

ciation, and we feel that we are much indebted to him for his wise counsel and advice, and for his efforts in reconciling the differences existing between your Committee and his associates among the horticultural inspectors.

Your Committee also feels greatly indebted to the Legislative Committee of the Inspectors' Association for their courtesy and evident desire to do all that they could to meet the nurserymen on a mutually satisfactory ground.

That Committee consisted of Prof. T. B. Symons of Maryland, Prof. E. D. Sanderson of West Virginia, Prof. Worsham of Georgia.

The proposition has the endorsement of the Association of Horticultural Inspectors and of Mr. Marlatt representing the Department of Agriculture, and if the bill as drawn correctly carries out the understanding now existing, and I have no doubt that it will, it is felt that there will be no serious difficulty in securing favorable action during the present session of Congress.

Further information as to the details of the bill will be ready for you in the next issue of this paper.

FARMERS' WEEK AT THE COLLEGE OF AGRICULTURE

This has now come to be an established institution, and among the conferences noted for January and February the Farmers' Week is an important feature. All the eastern colleges of agriculture, including the schools of agriculture in New York, in addition to Cornell College of Agriculture, have listed regular Farmers' Week conferences. At Cornell Farmers' Week is held from February 19th to 24th. At the St. Lawrence School of Agriculture it occurs January 22d to 27th.

FORESTRY AND PRISONERS

The State Conservation Commission of New York has decided to use prison labor in advancing the forestry interests of the Empire State. It has directed the establishment at Comstock, where the Great Meadows prison is located, of a nursery large enough to bring the output of the state nurseries up to double its present amount; in other words, to increase the production to 12,000 trees per year.

WESTERN ASSOCIATION OF NURSERYMEN

Interesting Meeting; Important Resolutions

The Western Association of Nurserymen held its 22d annual meeting at the Coates House, Kansas City, Mo., Dec. 13th and 14th, 1911.

10:30 A. M. President Geo. A. Marshall in the chair called to order with a full house responding.

The minutes of the last meeting were read. Applications of the Wellington Nursery Company, Wellington, Kansas, and the Graham Nursery Company, Mechanicsville, Iowa, for admission were received.

The following committees were appointed: On membership, Messrs. Youngers, Bernardin and Schuette; On nominations, Messrs. Mayhew, Lake and Willis; On resolutions, Messrs. Hill, Welch and Chase.

The preliminaries disposed of Capt. Watrous introduced in a comprehensive way present conditions and the struggle of the nurserymen for proper recognition by beneficial laws from the Government. An earnest discussion followed. At 12:45 P. M. the lunch table was spread. Adjournment succeeded and soon

the largest meeting of the Western Association of Nurserymen were pleasantly gathered to reinforce the body while the mind recreated for a little while. The Senior Stark was absent but the Junior Stark, worthy son of worthy sire, was present and so were the Stark delicious apples in abundance, larger, more handsome, more "delicious" than ever, if possible. A nurseryman with a delicious apple has a passport to paradise. Order came and the afternoon session began with a roll call showing the following present: Alabama Nursery Co., Delta, Colo.; H. F. Bents, Leavenworth, Kans.; E. P. Bernardin, Grantville, Kans.; C. W. Carman, Lawrence, Kans.; Des Moines Nursery Co., Des Moines, Iowa; The Elmhurst Nurseries, Argentine, Kans.; C. C. Elwell, Kansas City, Mo.; B. E. Fields & Son, Fremont, Nebr.; The Frazer Nursery Co., Huntsville, Ala.; German Nurseries, Beatrice, Nebr.; F. E. Griesa, Lawrence, Kans.; Harrison Nursery Co., York, Nebr.; Holman Bros., Leavenworth, Kans.; Holsinger Bros., Rosedale, Kans.; Kansas City Nurseries, Kansas City, Mo.; Prof. S. J. Hunter,

State University, Kans.; Prof. T. J. Headlee, Agricultural College, Col.; Kelsey Nurseries, St. Joseph, Mo.; D. S. Lake, Shenandoah, Iowa; Marshall Bros., Arlington, Neb.; Mt. Hope Nurseries, Lawrence, Kans.; The National Nurseries, Lawrence, Kans.; New Haven Nurseries, New Haven, Mo.; W. C. Reed, Vincennes, Ind.; J. W. Schuette & Co., St. Louis, Mo.; The Sedgwick Nurseries, Sedgwick, Kans.; J. H. Skinner & Co., Sta. A., Topeka, Kans.; F. H. Stannard & Co., Ottawa, Kans.; Stark Bros. N. & O. Co., Louisiana, Mo.; L. R. Taylor & Sons, Topeka, Kans.; The Texas Nursery Co., Sherman, Texas; James Truitt & Sons, Chanute,

Kans. Watrous Nursery Co., Des Moines, Iowa; The Waxahachie Nursery Co., Waxahachie, Texas; H. J. Weber & Sons Nursery Co., Nursery, Mo.; E. S. Welch, Shenandoah, Iowa; A. Willis, Ottawa, Kans.; Youngers & Co., Geneva, Nebr.; The Wellington Nursery, Wellington, Kans.; The Graham Nursery, Mechanicsville, Iowa.

The Committee on Nominations reported and a unanimous ballot followed elect-

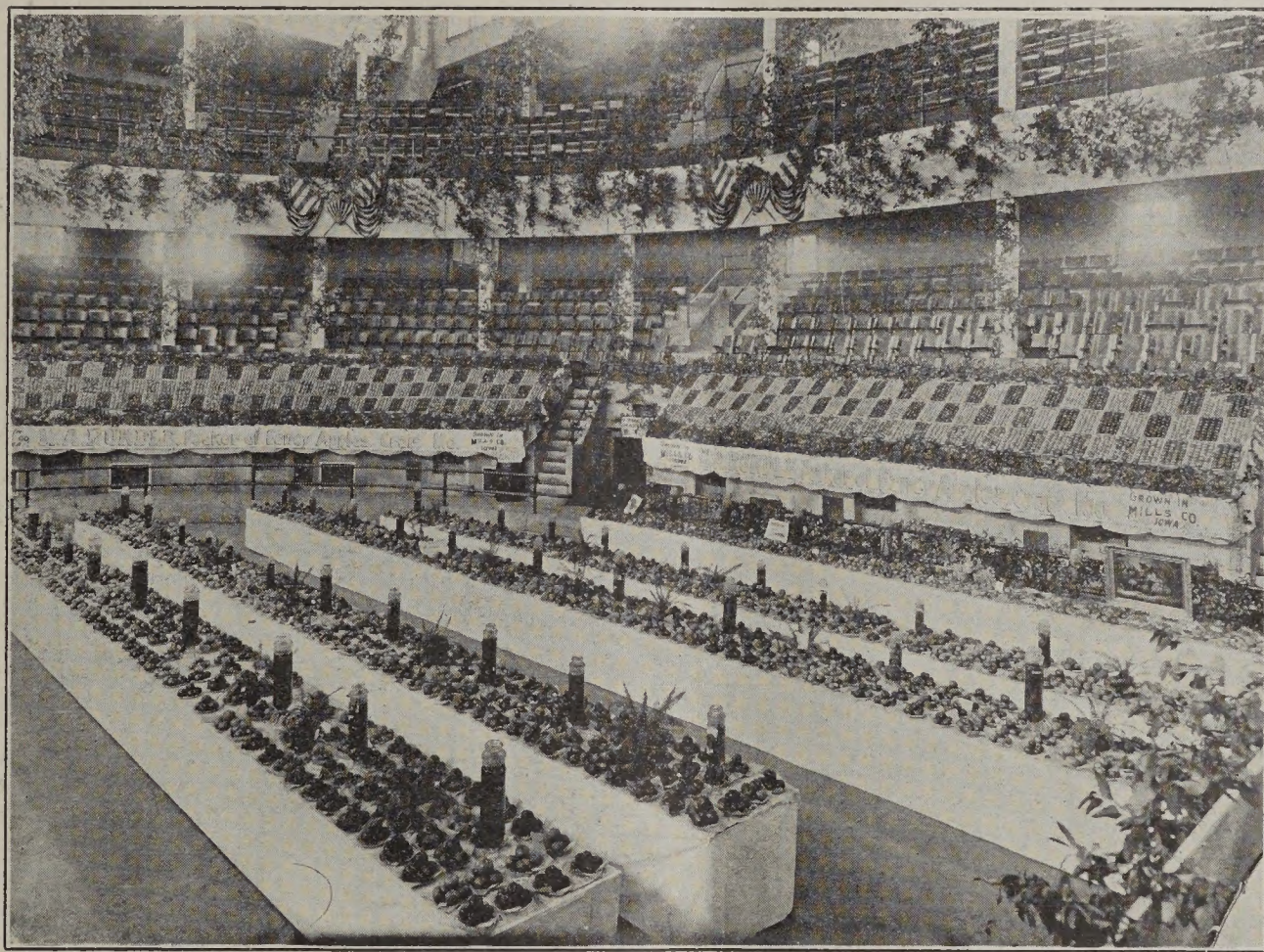
ing for the ensuing year the following: E. S. Welch, Shenandoah, Iowa, president; F. H. Weber, Nursery, Mo., vice-president; E. J. Holman, Leavenworth, Kans., secretary and treasurer; executive committee, F. H. Stannard, Ottawa, Kans., W. P. Stark, Louisiana, Mo., J. W. Hill, Des Moines, Iowa, W. C. Reed, Vincennes, Ind., Herbert Chase, Delta, Colo.

PAPERS AND DISCUSSIONS

Interesting papers were now read by Prof. S. J. Hunter on "Intertestate Co-operation"; by Prof. T. J. Headlee on the "Relation of the Agricultural College to Nurserymen"; by W. P. Stark, "The Federal Inspection Bill as Proposed by the Department of Agriculture." The morning topic by Capt. Watrous was embraced in an earnest discussion that resulted in the following resolution:

FEDERAL INSPECTION

Resolved; That this association heartily favors the passage of a federal law governing the importation of nursery



General View of Exhibits at the St. Joseph Apple Show

stock and standardizing interstate regulations pertaining to the transportation of nursery stock and recommend vesting the administration of such a law in a commission appointed by the President of the United States to be composed of the Secretary of Agriculture, the Chief of Bureau of Entomology, two active nurserymen, two active fruit-growers who are members of the American Pomological Society and two official horticultural inspectors; the members of this commission to be selected with a view to equal geographic representation.

We further recommend that the Western Association of Nurserymen appoint two of its members, preferably Hon. W. P. Stark of Louisiana, Mo., and Prof. S. J. Hunter of the University of Kansas, to attend the meeting of Horticultural Inspectors at Washington, D. C. on the 28th and 29th inst., to co-operate with the legislative committee of the American Association of Nurserymen in the formation and passage of such a federal inspection bill.

That we endorse and commend the action of our national legislative committee of the American Association of Nurserymen in their efforts to secure the passage of such a law.

Committee,
J. W. HILL
E. S. WELCH
HERBERT CHASE

STANDARDIZING GRADES

E. S. Welch presented the subject of "National Uniformity of Grades" and after good consideration the following table of grades was adopted and recommended as a National Standard, subject to the endorsement of the National Association.

All grades of trees shall be of fair shape, branched and well rooted. Caliper taken two inches from the crown or bud of the following classes:

Apple, 11-16 inch and up, 5 feet and up; 5-8 to 11-16 inch, 4 feet; $\frac{1}{2}$ to $\frac{5}{8}$ inch, $3\frac{1}{2}$ feet; $\frac{3}{8}$ to $\frac{1}{2}$ inch, 3 to 4 feet, whips included.

Cherry, $\frac{3}{4}$ inch and up, $4\frac{1}{2}$ feet and up; $\frac{5}{8}$ to $\frac{3}{4}$ inch, 4 feet; $\frac{1}{2}$ to $\frac{5}{8}$ inch, 3 feet; $\frac{3}{8}$ to $\frac{1}{2}$ inch, $2\frac{1}{2}$ feet.

Standard Pear, $\frac{3}{4}$ inch and up, 3 feet; $\frac{5}{8}$ to $\frac{3}{4}$ inch, 4 feet; $\frac{1}{2}$ to $\frac{5}{8}$ inch, $3\frac{1}{2}$ feet; $\frac{3}{8}$ to $\frac{1}{2}$ inch, 3 feet.

Dwarf Pear, $\frac{3}{4}$ inch and up, 3 feet; $\frac{5}{8}$ to $\frac{3}{4}$ inch, 3 feet; $\frac{1}{2}$ to $\frac{5}{8}$ inch, $2\frac{1}{2}$ feet; $\frac{3}{8}$ to $\frac{1}{2}$ inch, 2 feet.

Two year Plums, $\frac{3}{4}$ inch and up, 5 feet; $\frac{5}{8}$ to $\frac{3}{4}$ inch, 4 feet; $\frac{1}{2}$ to $\frac{5}{8}$ inch, $3\frac{1}{2}$ feet; $\frac{3}{8}$ to $\frac{1}{2}$ inch, 3 feet.

Peach, 1 year Plums and Apricots, 11-16 inch and up, 5 feet and up; 9-16 to 11-16 inch, 4 feet; 7-16 to 9-16 inch, 3 feet; 5-16 to 7-16 inch, 2 feet.

Some exceptions to the above may be made on such varieties as are known to the trade to be light growers or light from weather conditions affecting their growth, but such exceptions shall be noted in the printed price list issued by each grower or in their correspondence regarding all sales.

J. R. Mayhew's paper on "Replacement" elsewhere in this issue will be found good reading.

A. J. Brown, on "Nurserymen Attending Horticultural Meetings," gave Nebraska as an illustration of the public spirited character of Nurserymen closely identifying them-

selves with the Horticultural organizations. Said he, "Our State Society is officered almost entirely by Nurserymen and Nebraska has never fettered or affected the nursery interests and we have no San José scale."

F. H. Weber on "Trade in Ornamentals" said the trade was increasing in the West and the supply of stock not equal to the demand.

J. H. Skinner spoke on the different growths of grafts. Said he could not tell why

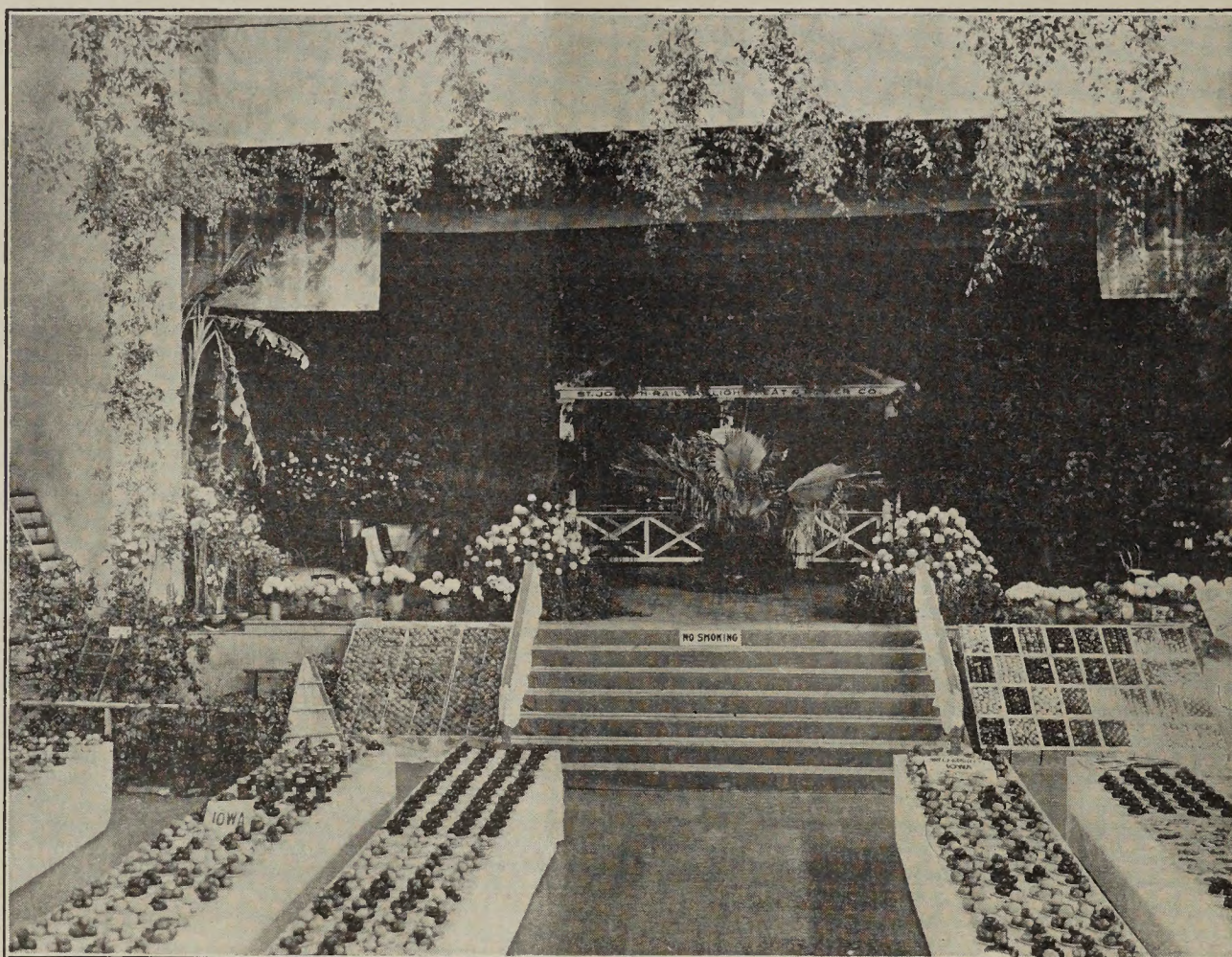
the difference but moved a permanent committee on "Experimentation" to which such problems might be referred for solution.

These and other topics were vigorously discussed until the close of day and resumed on the morning of the 14th at 9 A. M.

For the quick prosecution of needed corrections in State laws as experienced by W. C. Reed of Indiana, Peter Younger was voted an appropriation to be supplemented by private subscriptions and he was requested to proceed forthwith.

The loving cup filled with a beautiful bouquet had its place at the front and revived fragrant memories of the past. Business continued until the noon hour when final adjournment was had and the formal ending of the Western Association's best meeting yet took place.

Data supplied by E. J. Holman, Sec'y.



Showing Decorative Features of St. Joseph Apple Exhibition

RESOLUTIONS AND TRIBUTES TO DECEASED MEMBERS

The members of the Association greatly miss at this meeting the benign countenance and familiar voice of one of its most esteemed members, Major W. F. Heikes of Huntsville, Ala. Mr. Heikes was called to the Great Beyond on the 25th day of last August at Cleveland, Ohio, and now quietly rests amid the flowers of his southern home in the city of Huntsville.

He was one of the pioneer nurserymen of the United States who was widely and favorably known to the nurserymen and fruit growers of this country. He was a valuable member of this Association, as well as that of the American Association of Nurserymen, in both of which organizations his wise counsel will be greatly missed. We extend to his family and friends the sincere sympathy of the members of this Association.

(Resolution).

We regret also to chronicle the death of Norman J. Coleman which occurred in the early summer. Gov. Coleman was widely and favorably known among the horticulturists of this country. He was the first secretary of Agriculture and took an active part in the development of the United States along agricultural and horticultural lines. He was founder and editor of *Coleman's Rural World* up to the time of his death; which publication has done much for the development of this country.

We regard his demise as a severe loss to the horticultural interests of the United States and one whose place cannot easily be filled.

Resolved, that we extend a vote of thanks to Messrs. Stark for the excellent specimens of delicious apples furnished the members of this Association and assure them that same were appreciated very much.

J. W. HILL
E. S. WELCH
HERBERT CHASE

By E. P. Bernardin.

Resolved, that it is the sense of this Association that the time is now at hand that we should all abolish the replacing of nursery stock in our retail sales and pledge ourselves to work to the end that we may all eliminate this objectionable feature of our retail contracts at an early date.

Adopted.

E. J. HOLMAN, Sec'y.



E. S. WELCH
Shenandoah, Iowa, President

PRESIDENT MARSHALL'S ADDRESS

It is needless to mention the pleasant anticipation with which we look forward to these meetings. We have, not long ago, been pronounced a success both socially and from a financial standpoint. Besides the profits derived from the program, we are also encouraged and benefited by our pleasant visits with each other, the mingling together, giving and receiving sympathy and glory, each in turn, exchanging experiences with their results, etc., which a nurseryman is always willing to give and glad to receive; all these things are wholly beneficial as well as pleasant.

We know the nurseryman must necessarily be an optimist, one who will stand killing off three or four times a year and still come up smiling, one who can disentangle himself from troubles, clamor to the surface and start on his way rejoicing. The pessimist has fallen by the wayside long, long ago. For him to be a nurseryman, would be an impossibility and we are thankful that it has been so ordered as we need better

metal to carry on our business. The nurseryman must be a man who generally sees the bright side of things, must be enthusiastic, a good organizer and a pusher, cool and level headed and a generally good executor, wide awake and enterprising; must be blessed with an excess of hard common sense and a goodly amount of honest blood in his veins and you know this would generally make a good citizen. We talk of the honest old farmer; well, he is in an honest



W. P. STARK
Louisiana, Mo., Member Executive Committee

business, is in partnership with good old nature and has never been tempted by man. I may fairly say here, that many of the so-called honest farmers have not enough honest blood in their veins to float them in the nursery business for fifteen minutes. We, as an Association, have a few duties yet to perform. We have made a good start in grading and are getting pretty well down to the standard grades. About all that is left along that line, is the finishing. This will be a great improvement over the old way of selling and buying trees of not many years ago. Further, we are still having undesirable legislation from year to year in many of our states and it should be followed up very closely as an ounce of Preventative is worth a pound of Cure in this case surely, and the inspectors in many of our Western States should be mildly given to understand that unless the decisions are given carefully and fairly correct, investigation is likely to follow. Yet, while we are doing this, we should be very reasonable, with the best interests of the orchardists in mind first, last and all the time.

I believe I voice the sentiment of this Society, when I state that all we want is a square deal and we are perfectly willing to give the orchardists as much. We, as nurserymen, should acquaint ourselves more thoroughly with the orchards and vineyards of the country. In other words, we should be in closer touch with the fruit-growers. We should be careful not to advertise and push worthless things. There are far too many varieties of fruit on the market now, therefore, we should never add another unless it is superior and decidedly so. Our country has gotten to the age where varieties of poor quality are not desired, and should be removed from the orchards entirely and dropped from the nurseryman's list. If there were no poor fruit on the market at all, there would be a great deal more fruit eaten, and when more fruit is eaten, there is a better demand for it; where there is a better demand, there is more planting and where there is more planting there is more business for the nurseryman. Therefore, when we encourage this, we not only benefit the country at large, but we benefit ourselves.

Note and Comment

THE AMERICAN HORTICULTURIST

Volume I, Number 1, of *The American Horticulturist*, a monthly magazine, appeared in November, 1911. It makes a very attractive showing, the large number of half tones being a noticeable feature. Articles are presented by well known authorities on general and special subjects connected with fruit growing. Benjamin W. Douglass is the editor, and the paper is published at Fowler, Indiana. The subscription price is \$1.50. We wish the new journal success.

APPLES MOVING SLOWLY

The apple situation was unsatisfactory during the autumn months. Prices have been lower than for several years. In New York during the forepart of December, good Baldwins were sold for \$2.50 per barrel, while Greenings dropped as low as \$1.50. Boxed apples also brought unsatisfactory prices. The output of fruit seems larger this year than indicated by the estimates of either the producer or the purchaser.

ORCHARD HEATING

Secure a copy of the November, 1911, issue of *Better Fruit*. It is the special orchard heating edition, and contains valuable accounts of experiences in orchard heating where fine crops of fruit were matured as a result of vigilance at the right time. The use of coal and oil heaters is discussed, as well as the practice of smudging, and many illustrations show orchards where the fires are burning or are ready to be lighted.

Obituary

OSCAR P. NICHOLS

On December 15, at the advanced age of eighty-two years, there passed away a striking figure from the ranks of the nurserymen of the Middle West in the person of Oscar Palen Nichols of the firm of Nichols & Lorton, Davenport, Iowa. Mr. Nichols was one of the oldest residents of Davenport, having passed seventy-three years of his life in that

city. He was a partner in the firm of Nichols & Lorton for over forty years, and during that period this nursery firm was one of the leading organizations of its kind in the country known at that time as the "West." They were extensive growers of nursery stock, and did much to advertise the city of Davenport. Mr. Nichols retired from active work in the business in 1906. He is survived by one daughter and two brothers.

Exhibitions

INTERNATIONAL HORTICULTURAL EXHIBITION

In a paper read before the Royal Horticultural Society, Mr. Edward White, managing director of the Royal International Horticultural Exhibition, to be held in May, drew the attention of the audience to the benefits which may be derived by horticulturists from such an exhibition. The last one of international scope in the British Isles took place in 1866.

Mr. White noted the importance of the horticultural industry in England, with its many tributary lines of work. Further, he mentioned the interest which is taken in things horticultural by the Royal family. This is indicated by King George's willingness to open the exhibition on May twenty-second at noon. The site for the exhibition covers twenty-one acres of the grounds of the Royal Hospital at Chelsea, and is reached by two broad entrances. Ample financial support is assured, and the total prize list will amount to several thousand pounds.

TENNESSEE STATE NURSERYMEN'S ASSOCIATION AT NASHVILLE

The Nurserymen's Association of this state will meet at Nashville on January 26, 1912, and on the preceding day the State Horticultural Society will convene at the same place.

PROGRAM

Morning Session, 9:30 o'clock.

Call to Order

Invocation.....Dr. James I. Vance, Nashville
Address of Welcome,

Captain T. F. Peck, Commissioner of Agr.

Response.....J. H. Austin, Antioch

The Labor Question in the Nursery,Robert Twitty, Taft

Coöperation in Selling Nursery Stock and Marketing Fruit,

T. B. Thackston, L. & I. Agt. Sou. Ry., Bristol

GrassesH. A. Clarke, Wartrace

Appointment of Committees: Nominations—Auditing—
Resolutions.

President, Percy Brown, Spring Hill.

Vice-president, Robert Morris, Ridgetop.

Secretary-Treasurer, C. A. Keffer, State University, Knoxville.

Sectional Vice-Presidents, East Tennessee—W. M. Wood, Bristol; Middle Tennessee—Prof. John Daniels, Nashville; West Tennessee, W. H. Rochelle, Jackson.

We are in receipt of an elaborate calendar from E. T. Dickinson, 1 Broadway, New York, entitled "The Dicken's Calendar," which portrays Mr. Weller, Sr., in *Pickwick Papers*, giving advice to his son: "Take example by your father, my boy, and be very careful o' widders all your life."

OVERHEAD IRRIGATION IN ORCHARDS OF THE WEST

By AUGUST WOLF, Spokane, Wash.

Irrigation by means of whirling sprinklers is to be carried out on an extensive scale in the Quincy district in Grant County, Wash., upon a large tract of land a few miles south of the town of Winchester. The apparatus, specially designed for the experiment, is larger and of greater capacity than the sprinklers ordinarily used on city lawns. Water will be lifted from a deep well by a double-action pump, driven by a gasoline engine.

In making the foregoing announcement at his headquarters in Spokane, Stephen O. Jayne, irrigation investigator for the United States Department of Agriculture, said that owing to the irregularity of the land and the sandy character of the soil a large expense would be involved to properly grade it for irrigation by ordinary methods, and, he added, it is to avoid this outlay, as well as to secure a more economical use of water than would be possible otherwise, that the experiment is to be carried on.

"The irrigation branch of the Department of Agriculture is conducting experiments throughout Washington, Oregon, Idaho, Montana and other states," Mr. Jayne continued, "with a view of determining the practicability of the various methods and it is believed that the knowledge so gained will result in a material saving and increased efficiency in the use of valuable water supplies.

"While irrigation by the use of whirling sprinklers is not a new idea, having been successfully and profitably practiced in various places in connection principally with truck-farming operations, it is something of an innovation to undertake the watering of general field crops by this method.

"Apple growers in the vicinity of Chelan, Wash., are this season installing sprinkling systems also, and during the summer the whirlers will be going in many orchards.

"Albert Seiter, a successful orchardist of Moran Prairie, near Spokane, last year installed such a system and was greatly pleased with the results, also demonstrating to his satisfaction the advantages of applying water in this way. A novel idea was to place a light dressing of straw beneath the trees to prevent the sprinkling from beating the ground so as to compact and crust the surface. He has some old Jonathan apple trees which never produced fruit of marketable size until last year, when by irrigating them with sprinklers a very heavy yield was obtained, most of the apples being larger than four-tier.

"Another system of sprinkling that is meeting with much favor and being widely adopted by truck farmers, berry growers and greenhouse men throughout the eastern, central and southern states consists of running parallel lines of galvanized iron pipe, elevated high enough above the ground to permit free passage of men and teams beneath in carrying on the cultural operations. These pipes, or nozzle lines, as they are called are usually set 40 to 60 feet apart and supported on top of posts about seven to eight feet high.

"Small brass nozzles are screwed into the parallel pipes at intervals of from three to four feet and when the system is in operation thousands of tiny streams shoot forth, pro-

ducing a result almost like natural rain over the area between the nozzle lines. The pipes are so arranged that they can be revolved to give the jets whatever angle is desired in leaving the nozzles.

"The state of Washington has now about a dozen installations of this type and the system also is growing in popularity in Oregon and California.

"Sprinkling by whatever system is a more expensive way of irrigating than by means so far commonly employed and it will doubtless be some time before it is very generally practised; but in places where water is very expensive or where the land is either too irregular to permit of grading or so sandy that heavy losses occur by deep percolation, irrigation by some system of sprinkling may often be profitably done. Costs of installation and operation are heavy for such systems, however, and intensive farming, yielding large returns per acre, must be the rule where sprinkling systems are employed."

A GIFT WITH A THOUGHT IN IT

What other Christmas present costs so little and means so much as a subscription to *The Youth's Companion*—52 weeks for \$1.75? It is a gift which benefits not only the one who receives it, but every member of the same household.

If you do not know *The Companion*, if you are at all uncertain, just send us a postal card asking for sample copies.

Not only is *The Companion* the best gift you can choose for the money, but the easiest to choose. Keep the loving Christmas thought bright and unwearied by making your gift *The Youth's Companion*.

The one to whom you give the subscription will receive free *The Companion's Calendar* for 1912, lithographed in ten colors and gold, and you, too, as giver of the subscription, will receive a copy of the *Calendar*.

The subscription price is now only \$1.75, but on January 1, 1912, it will be advanced to \$2.00.

The Youth's Companion, 144 Berkeley St., Boston, Mass.

New subscriptions received at this office.

NEWBURY'S FORM \$100,000 COMPANY

PIERRE, S. D.—Articles of incorporation have been filed for a new nursery firm in this state, at Mitchell, under the name of "The Newbury's". The new firm is capitalized at \$100,000, and is incorporated by Charles E., Edwin C., Elizabeth A. and Jessie E. Newbury, and Frank J. Herrick, of Mitchell, where the Newbury family has built up a large greenhouse business.

The Roswell Nursery Co., at Roswell, N. M., has prepared for an enlargement of its business by establishing a sub-nursery at the corner of Fifth and Main streets. Wyatt Johnson, manager of the nursery, will have charge of the branch.

CALIFORNIA NURSERYMEN ORGANIZE

The nurserymen of California recently effected an organization for the purpose of "advancing the material and social sides of the nursery business." Among the promoters of the organization are F. H. Wilson, Leonard Coates, Fred H. Howard, Almon Wheeler, Thomas Chisholm, George C. Roeding, John S. Armstrong, and E. Gill. Mr. W. V. Eberly of Niles, California, was elected president.

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Vice-President and Editor, JOHN CRAIG
Secretary-Treasurer and Business Manager, C. L. YATES

The only trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

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Six months,75
Foreign Subscriptions, in advance,	1.50
Six months,	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester, N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Ithaca, N. Y.

Entered in the Post Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., JANUARY 1912.

AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—J. H. Dayton, Painesville, Ohio; vice-president, W. H. Wyman, North Abington, Mass.; secretary, John Hall, Rochester, N. Y.; treasurer, C. L. Yates, Rochester, N. Y.

EXECUTIVE COMMITTEE—E. M. Sherman, Charles City, Ia.; H. B. Chase, Huntsville, Ala.; J. M. Pitkin, Newark, N. Y.; J. H. Dayton, *Ex-Officio*, Painesville Ohio; John Hall, *Ex-Officio*, Sec'y, Rochester, N. Y.

CHAIRMEN OF COMMITTEES.

TRANSPORTATION—D. S. Lake, Shenandoah, Ia.; Chas. M. Sizemore, Louisiana, Mo.
TARIFF—Irving Rouse, Rochester, N. Y.

LEGISLATION EAST OF MISSISSIPPI RIVER—Wm. Pitkin, Rochester, N. Y.

LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—C. J. Maloy, Rochester, N. Y.

EXHIBITS—A. E. Robinson, Bedford, Mass.

ARRANGEMENTS—John Hall, Rochester, N. Y.; W. H. Wyman, North Abington, Mass.; H. P. Kelsey, Salem, Mass.

ENTERTAINMENT—J. Woodward Manning, North Wilmington, Mass.

PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.

ROOT-GALL—E. A. Smith, Lake City, Minn.

STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dreshertown, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President, Paul M. Hubbard, Bristol, Conn.; Secretary, C. H. Sierman, Hartford, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

National Nurserymen's Association of Ohio—President, J. W. McNary, Dayton O.; secretary, W. B. Cole, Painesville, O.

Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary, Earl Peters, Mt. Holy Springs, Pa.

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President A. I. Smith, Knoxville, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.

Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

INSPECTION OF FOREIGN NURSERY STOCK

"A bill to regulate the importation and interstate transportation of nursery stock to enable the Secretary of Agriculture to establish and maintain quarantine districts for plant diseases and insect pests, to permit and regulate the movement of fruits, plants, and vegetables therefrom, and for other purposes," has been introduced into the House of Representatives by Mr. Simmons. A similar bill has been introduced into the Senate by Mr. Burnham. This bill prohibits the importation of nursery stock unaccompanied by a certificate of inspection, except where nursery stock is being imported for scientific purposes. It provides that the Secretary of the Treasury shall notify the Secretary of Agriculture of the arrival of nursery stock at ports of entry; that the importer shall furnish the Secretary of Agriculture with the name and address of the consignee, and the character and quantity of stock it is proposed to ship. It prohibits transportation companies from receiving nursery stock without notifying the Secretary of Agriculture. It provides that all packages of nursery stock coming from foreign countries shall be "plainly and correctly marked to show nature and quantity of the contents, the country and district where the same was grown, and the name of the shipper." Transportation companies are forbidden to handle packages not so marked.

The bill further gives the Secretary of Agriculture absolute power to prohibit importation of nursery stock from any country where injurious disease or insects may exist. When such region is quarantined, the prohibition is absolute. The bill provides further that the Secretary of Agriculture may quarantine any state or territory of the United States when such region is infested with dangerous disease or injurious insects. Under such conditions, either of foreign or domestic quarantine, the Secretary of Agriculture is authorized to make and promulgate special rules and regulations for the inspection, disinfection, and certification of nursery stock as in his wisdom he deems best. The bill provides for punishing offenders by levying a fine not exceeding \$500, or by imprisonment not exceeding one year, giving the court power to impose both fine and imprisonment, if thought proper. The sum of \$25,000 is to be appropriated to make the act effective, which, if passed, will be enforced after the first day of July, 1912.

These are the main features of the bill which the Committee on Legislation of the American Association of Nurserymen objected to very strenuously at the St. Louis meeting. The nurserymen take strong exception to the placing in the hands of the Bureau of Entomology, which will, of course, act as an advisory and executive body to the Secretary of Agriculture, the regulation of the nursery trade, both domestic and foreign. The relations of the nurserymen with the Bureau of Entomology have not been satisfactory during the term of their negotiations in connection with various proposed bills of this nature. The nurserymen claim that there has been decided lack of effort on the part of the officials of the Bureau of Entomology to ascertain not only the attitude, but the requirements of the nursery industry. They claim that the Bureau of Entomology has not kept faith with the nurserymen, and has shown decided

disregard for fundamental trade requirements. The nurserymen strenuously oppose placing authority in the hands of any man or any small body of Department officials which will enable them to stifle or absolutely suppress important commercial enterprises involving the investment of very considerable capital. The nurserymen feel that they themselves should be regarded as reasonable individuals, and in the light of their lifetime experience in these enterprises, should have a say in legislation which is so important as to check or absolutely destroy trade opportunities.

There certainly has been a serious lack of diplomacy on the part of the Washington officials. Time after time they have been invited to meet the nurserymen for the purpose of conferring on this important subject, but one excuse or another has prevented the conference. This apparent lack of desire on the part of the federal entomological authorities has tended to destroy the proper feeling of confidence which nurserymen should possess with reference to the officials of such an important department as the federal Bureau of Entomology. The nurserymen are well organized, and do not propose to be ridden over roughshod in this matter. They are disposed to fight for their rights, as they have in the past, and the probability is that they will win out. All persons having nursery interests should make a study of this bill, H. R. 12311, and stand by the action of the Legislative Committee in opposing those features which are in opposition to the welfare of the nursery industry.

WESTERN ASSOCIATION ON INSPEC- TION BILL

Anent the subject of legislation discussed at length in the above editorial, we are informed that a resolution was passed by the Western Association of Nurserymen at its recent meeting in Kansas City, endorsing the action of the Legislative Committee of the American Association, as taken at the St. Louis meeting, June, 1911. This Association further empowered Mr. W. P. Stark and Prof. S. J. Hunter of Kansas City a special committee to go to Washington for the purpose of coöperating with the national committee in the formulation and passage of a bill governing federal inspection. This bill will not in any important manner, so far as the actual inspection work is concerned, differ from the one already introduced; but it will take the power out of the hands of an individual or a single department, and place it in the hands of a commission to be made up of persons representing the various interests involved. In this commission, the Bureau of Entomology, the active nursery interests of the United States, and the horticultural inspectors are to be represented. In this way, the quarantine clause which the nurserymen strongly object to will be placed in the hands of a commission, instead of in the hands of a single individual who does not enjoy the confidence of the nurserymen.

This in substance is what the NATIONAL NURSERYMAN recommended some time ago. The NATIONAL NURSERYMAN and the nurserymen of the country are not opposing reasonable legislation which aims to protect the country from the invasion of injurious parasites, but the NATIONAL NURSERYMAN insists on urging the rights of the industry

which it stands for. It believes in coöperative action, and believes that the representatives of nursery interests of the country are not only reasonable men, but capable of viewing the welfare of the country at large in as generous a light as anyone else. They may not be out and out altruists, but they are reasonable business men, willing to take responsibility on behalf of the country's best interests, as well as the interests of the industry which is supporting them.

This matter of quarantine of domestic or foreign plant-producing regions is sufficiently important to warrant the appointment of a thoroughly representative organization, and one appropriately representing the various interests involved.

Legislation

MISSISSIPPI NURSERIES RECEIVING INSPECTION CERTIFICATE, 1911-1912

A. C. Ball, Mantee; J. C. Barton, Booneville; I. E. Bass & Sons Pecan Company, Lumberton; Bechtel Pecan Nurseries, Theo. Bechtel, Prop., Ocean Springs; D. C. Benton, Lakeview; James Brodie, Biloxi; R. W. Bruce, Port Gibson; The Corinth Nurseries, G. W. Strickland, Propr., Corinth; The Cummings Company, W. W. Cummings, Pres., Meridian; A. G. Delmas Sons', Scranton; I. P. Delmas, Scranton; Old Denny Orchard & Nursery, Aug. Edwards, Prop., Lucedale; East Tennessee & Mississippi Orchard Co., P. G. Stanley, Mgr., New Albany; The Eupora Nursery, J. E. Lewis, Prop., Eupora; C. Forkert, Ocean Springs; J. B. Good, Sturgis, dealer in nursery stock; L. E. Hall, Hattiesburg and Scranton; Hall Nursery Stock Co., W. L. Hall, Mgr., Meridian; B. N. Hatch, Handsboro; F. H. Lewis, Scranton; W. B. Lundy, Lexington; The Newton Nurseries, J. R. Woodham, Prop., Newton; Ocean Springs Pecan Co., C. E. Pabst & Sons, Prop., Ocean Springs; Parker Duck, Poultry & Pecan Co., J. B. Parker, Prop., Prairie Point; Peachwood Nurseries, A. C. Coles, Prop., State Line; Ramsay Pecan Nursery, R. T. Ramsay, Prop., Ocean Springs; W. P. Ramsay, Seymour; Southern Floral Nursery Co., W. J. Hudson, Mgr., Bucatunna; Southern Nurseries, W. A. Woods, Prop., Tomnolen; Southern Nut Nursery Co., J. M. Hart, Mgr., Ocean Springs; P. G. Stanley, New Albany; John B. Stroud, Pass Christian, dealer in nursery stock; Mrs. W. R. Stuart, Ocean Springs; M. J. Taylor, Scranton; Toomsaba Nurseries, W. C. Rogers & Sons, Prop., Toomsaba; United States Nursery Co., S. W. Crowell, Mgr., Roseacres; W. R. Van Cleave, Scranton; D. B. Watson, Weir.

PLAN FOR 1912 CONVENTION

It may be of interest to the Nurserymen to learn that the Committee on Arrangements, Messrs. Wyman and Kelsey, are corresponding with the different railroads for rates for the trip to Boston for the 37th Annual Convention of the American Association of Nurserymen in June. The hotel which will be the headquarters has nearly been decided upon, and it is quite evident that the meeting will be held in Horticultural Hall.

AFTER WE HAVE ABOLISHED THE PRACTICE OF REPLACING NURSERY STOCK--WHAT NEXT?

Address at the Kansas City Meeting of Western Nurserymen

By J. R. Mayhew, Waxahachie, Texas

When I tell you that for two seasons no wide-awake, thoroughly up-to-date nurseryman in my part of the country has practiced replacing at less than full value, it will explain the liberty I have taken in changing somewhat the subject assigned me, but for fear some of my friends may think my ardor for this reform has cooled, I will answer the question, "Should we not abolish the replacement of nursery stock on all retail orders and under all conditions?" Y-E-S, as emphatically, as unequivocally as I did two years ago. I want again to say that we of the Texas Association have, first by resolution and last by living up to the resolution, accomplished the impossible, as some of my friends termed it. It was an easy task after all, easy after conviction came upon us, and now I'll treat if you can find a self-respecting nurseryman in my state who is not heartily ashamed of this shyster method of the past. Somehow or other I am so ashamed of it for myself and for such men as I could name (but will not, for maybe it did not come out on them as it did me) that I intend to quit talking about it. It is a character of advertisement that will do us little good for the practice proved us poor business men indeed. One of my banker friends got hold of one of our trade journals that happened to have one of my articles on this question, and in wonderment he asked the question, "Have you nurserymen been in the habit of guaranteeing stock to live?" I have wondered ever since if my credit is as good at that bank as it was before this question was asked and answered.

A FOOLISH POLICY

My friends, this nonsensical policy is questionably the parent of many of our ills and the sooner we wash our hands of such criminally foolish methods the sooner we may expect the business world to respect us. As I have said on several occasions heretofore, the dollars and cents that we put into the deal was great, was a severe loss from this point of view, but greater still was the loss in that which goes to make all business great—confidence. It was destroying our confidence in the commodity we were producing, destroying the customer's confidence in the commodity purchased.

It was a shyster idea conceived in the iniquitous brain of a shyster salesman, perhaps, and you and I permitted this policy to creep into our business because we thought we would go bankrupt if the salesman's wishes in the matter were crossed. Let me tell you right here, and I have amended my subject that I may pay my respects to him further on, if we don't get rid of this shyster element in salesmanship, if we don't get rid of this vicious salesman who is largely responsible for our unhealthy reputation with the retail buyer, we will never succeed. I am not one who would disparage all salesmen, a few of them are worthy and conduct

themselves and their business along high business lines, but is it not true that the element I condemn loses you each year the money, and oftentimes more, the best ones make you? When we cast up accounts at the end of the season, I am inclined to believe this is pretty nearly true. What I plead for is that we may "acquit ourselves like men," and when the salesman tempts us with sophistry that we may quote him words of eternal truth.

But back to the original question, for a member of your program committee indicated to me that I was expected to confine my remarks largely to the subject appearing on program. It was my pleasure to prepare the resolution condemning this policy, which was adopted by the Texas Nurserymen's Association in 1909, also to introduce a similar resolution before the American Association of Nurserymen at Denver, in June, 1910. Those of you who were present remember that this resolution was adopted unanimously, so it seems to me that we are making progress. I have received letters from nurserymen from every part of the United States thanking me for what I have written on the subject and assuring me of their coöperation. If, in my feeble way, I have contributed anything whatever that has tended to lift our business to a higher plane, I am more than repaid. I do not know how long it will take to outlive the evil results of this policy for unstable policies in business, like sin in the human life, leave a scar, but I do know that the longer continued the deeper the scar and the harder to heal. I am glad that we in the great state of Texas have two years to our credit in this matter, and while I am not advised to speak for the large list of nurserymen of Texas, I can speak for one firm and for that firm I will say, "for me and my house we will serve the Lord."

If I was confident my brethren in the trade held to a different view, it would make little difference, for rather than be confronted daily with requisition for replace on stock whose failure I knew was the result of carelessness, unfavorable weather conditions, or a thousand and one conditions over which I had no control, I would elect to support my family in some other vocation.

AFTER WE HAVE ABOLISHED THE PRACTICE OF REPLACE—WHAT NEXT?

There is not a man present who does not feel the absolute necessity of certain and perhaps radical changes if we are to succeed in the truest sense, who feels, to say the least, indisposed, and the need of a business tonic. I have received letters during the past month from friends over the country whose minds, like my own, are intent on some needed reforms, and I believe these reforms are coming quick. We must abolish the practice of replace, and I hope someone

will introduce at this meeting a resolution to that effect, to which I promise not to speak; but, my friends, there are some other things we must do. We must eliminate the shyster salesman if he takes with him the good ones also. We must spy out and mark the "dead beat" who buys trees wholesale with no intention of paying for them, and in this matter our association is doing a fine work. We must keep pace with twentieth century methods all along the line. But what will this profit us if we continue to sell our product at less than the cost of production?

ADVANCE PRICES

We must raise prices. On no other commodity under the sun is the margin of profits so dangerously small, and it is also true that on no other commodity produced are the risks so great. The past few years of drouth over the South-West have fully convinced me of that fact. We are at the mercy of the elements even before stock is planted, and each day thereafter is one of anxious care. If the cost of production on a suit of clothes that you buy in the market to-day for \$5.00 was as great as the cost of production on \$50.00 worth of nursery stock, and your only chance of obtaining raiment was from the proceeds of your business, the nurseryman's garb the year around would resemble that of the picaninny of the South in August.

I again say we must revise our prices, and the revision must have something of the Republican Tariff revision ring about it. I know what obstacles are here in the many farmer-nurserymen over the country, in that same shyster salesman spoken of a few moments since who buys as a dealer from said farmer-nurseryman, and who, by giving customer receipted stock for his board bill which is never delivered is able to sell cheap trees, and they are cheap; who continues to guarantee all trees to live for five years, etc., but whatever the obstacles they must be overcome. Prices of nursery stock must advance.

One other thing I want to mention, and I close. We must take the business management out of salesmen's hands.

What do I mean? Simply this. We are being dictated to by the salesman who is often a dealer, and who buys stock at less than wholesale prices. You lend him your good name to do business on, borrow the money from your bank to finance his business, allow him to name practically the terms of contract, even to the price of your stock, for what? The infinite pleasure of being his humble and obedient servant during the life of contract, and less than a gambler's chance for the money he owes you for stock and advances. "He who steals my purse steals trash, but he who filches from me my good name robs me of that which enriches him not but leaves me poor indeed!" Our poverty in money is not serious, but our poverty in good name among the very people we are trying to serve is serious. Our good name has been and is being embezzled by this same unworthy salesman who cares not a penny whether you succeed or fail. If he fails to rewrite a contract with me for another year he knows you will take him, and he goes back over the territory and explains the changed relations to the people who patronized him because he was operating under my name in a way calculated to destroy the customer's confidence in me. I

wish every nurseryman in the land would take a solemn oath to wage a united war of extermination on this character of salesmanship.

But I must close! Already I have presumed on your goodness and have taken more of your time than I should. My remarks have something of the ring of pessimism, but in the matters discussed, as well as all other matters, I am an optimist. I believe with all my heart that your work and mine is blessing humanity, that the world is better and more beautiful because of your efforts in the world, but I also believe we should not stop short of our best. If a thing is not right it is wrong, and if wrong it is your business and mine to right it. I believe, furthermore, that the nursery business over the entire country, and over the great West and South-West particularly, is destined to grow by leaps and bounds. To-day, as never before in the history of our country, it seems to me that opportunity knocks at our door.

I have talked plainly to you of certain conditions that should not exist in our special line of business if we are to make use of this opportunity, have endeavored to point out some weak places in our methods, not because I derive any pleasure in fault-finding but because it is only after we recognize a weakness that there is hope for strength. These breaches in the walls of our business have become a reproach. "Then said I unto them, ye see the distress that we are in . . . come, let us build up the wall of Jerusalem that we be no more a reproach."

VIRGINIA STATE HORTICULTURAL SOCIETY

The sixteenth annual session of this organization will take place in the Assembly Hall, Harrisonburg, Va., on January 10th and 11th, 1912. For its list of speakers, the Society has drawn largely upon the staff of the Virginia Experiment Station at Blacksburg, and several men from other states are expected to deliver addresses. This comparatively young society now has over one thousand members, and its ambition is to double this number at once. The fruit exhibit forms an important part of the annual meeting.

ADAMS COUNTY, PA., HORTICULTURAL MEETING

One of the attractive announcements issued by the Fruit Growers' Association of Adams County, Pennsylvania, has been received at this office. The seventh annual convention was held at Bendersville, December 13, 14, and 15. Besides giving the program, this pamphlet prints the constitution and by-laws of the organization. A long list of questions for discussion follows the general program. Among the speakers were fruit growers of the state, and members of the staff of the state agricultural college, as well as a few speakers from out of the state.

In December Stark Bros. Nurseries & Orchards Co. of Louisiana, Mo., again remembered the business office of THE NATIONAL NURSERYMAN with a box of delicious apples. This time the variety comprises, Delicious, Black Ben, and Stayman's Winesap. These apples, are very large, and have a beautiful reddish color, they have excellent keeping qualities, and are delightful to the taste.

NATIONAL NUT GROWERS' MEETING

The Tenth Annual Meeting of the National Nut Growers' Association was held at the Battle House, Mobile, Alabama, October 4, 5 and 6.

Special features of the program were the President's address, "Ten Years' Progress," by H. K. Miller, of Monticello, Florida, and papers by Eugene Merritt, Bureau of Statistics, Washington, D. C., "Our Trade in Nuts;" T. P. Littlepage, of Boonville, Indiana, "Extending the Pecan Area;" Prof. P. F. Williams of Auburn, Alabama, "The Industry in Alabama;" Col. C. A. Van Duzee, of St. Paul, Minnesota, "Pecan Promotions;" Prof. E. J. Kyle, of College Station, Texas, "Top Working the Hickory to Pecan;" and the Report of the Committee on Markets and Marketing by Col. C. A. Van Duzee.

Special interest was attracted by this latter report, as Chairman Van Duzee urged the importance of uniformity in grade of produce and price. The speaker stated that the time had not yet arrived for cooperation in the selling of improved pecans. He believed that, for the present, the individual growers should strive to develop an express and mail order trade in the Northern markets until high grade pecans come to be grown in sufficient quantities to justify the formation of a cooperative selling agency.

An especial feature of this Convention was the part handled by the ladies, under the management of Mrs. Thomas A. Banning of Chicago, Illinois. The evening of the second day was given over to a discussion and demonstration, by the ladies, on nut foods.

Pres. H. K. Miller and Sec. J. F. Wilson were re-elected to serve for the ensuing year. Mr. Nathan Brewer, of Newport, Florida, was made the new treasurer.

Gulfport, Mississippi, was selected as the place for holding the 1912 meeting.

FIRM CHANGES NAME

Since the death of John Siebenthaler of Dayton, Ohio, the business will be carried on by his two sons, Wilbur G. and Clarence O., under the name of The John Siebenthaler Sons' Co. The John Siebenthaler Sons' Co. are growers and dealers in a general assortment of nursery stock.

Among the first calendars of the season to arrive for the year 1912 is a very pretty one, a panel of a bride, from the *Farmer's Review*, of Chicago, Ill.

Attention is called to the Dexter Yarn Co. advertisement on page 30.

Getting business is just like courting a girl—you must offer the right kind of goods and keep right on calling.

For one who is looking for a good position, just as suggested in the advertisement—"H" care this office—we would advise them to correspond. It is a very good thing.

A new fumigating house is nearing completion at the Maple Avenue nurseries of Hoopes Bros. & Thomas Co., Westchester, Pa., and will be in condition for use within a short time.

Fred Haxton, 4717 Winthrop Avenue, Chicago, who has been doing a jobbing business in shrubs for three years, is

establishing his own nursery, and will specialize in selling ornamentals through advertising.

"THE QUEENS"

TORONTO, ONT., Dec. 13, 1911.

As you see I am not yet back home but hope to be there Sunday next.

Business is good. I never saw it better. The question is how to handle it. Our nursery business is beating all records. Fruit stocks are sold out long since—except apples, and on ornamentals we will soon now have to throw our hands.

In other lines handled by the florists we are booking orders for fall 1912. Up to to-night I am about \$15,000 ahead over same four weeks trip last year, visiting the same firms,—I figured we were getting the orders some one else was losing, as reports seem to indicate that business is rather dull in general.

They've had the mildest weather around here for the past two weeks. Yesterday and to-day were just like spring days. A few days more would bring the butterflies and spring flowers. I hope that some of the Painesville and Rochester nurserymen have had some of it for it would enable them to resume digging and fill up their cellars.

Kindest regards,

JAMES MCHUTCHISON,
McHutchison & Co., New York City.

WANTED Three or four men who are good quick grafters and budders and understand general nursery work. State experience and wages desired. Give reference. W. T. HOOD & CO., Richmond, Virginia.

Strawberry Plants

I have millions of them. Wholesale price list free.
Thirty-two years growing good plants.

J. A. BAUER, Judsonia, Ark., Box 9

A Few of Our Good Points . . .

PROMPT SERVICE

COLORED PLATES TRUE TO NAME
HAND MADE, LITHO OR PHOTOS.

BEST BINDINGS of all kinds

UP-TO-DATE CATALOGUES AND PLATE BOOKS

NEW PRINTED FORMS TO HELP MAKE SALES

SUPERIOR QUALITY

Send for Catalogue and let us know
your wants for next season

Rochester Lithographing Co.

22 ELIZABETH STREET
ROCHESTER, N. Y.

Good Stock from Young Fields guaranteed true to name. Free from disease. Prices on application.

SHARON NURSERIES

SHARON SPRINGS, N. Y.

The Cureton Nurseries, Austell, Ga., offer for Fall delivery Apple, Pear, Peach, Cherry, Plum, Figs, Mulberry, Pecan, English Walnut, Grapevines, Roses, Magnolia Grandiflora, Carolina Poplar, 5,000 California Privet, 10,000 Amoor River Privet, French Apple Seedlings. All clean, healthy stock. Write for wholesale price list.

A. Hamilton & Sons, Bangor, Mich., offer the following apple scions: Baldwin, R. I. Greening, Maidens Blush, Grimes Golden, Stark, Northern Spy, Steele's Red, American Golden Russett, Wagner and Fallawater, cut from bearing trees of superior types. Scions run 15 to 30 inches long.

TREE SEEDS

Large assortment of Tree, Shrub and Fruit Seeds for ornamental and forestry purposes. Send for catalogue.

CONYERS B. FLEU, Jr., GERMANTOWN, PHILA.

Seed of Genuine Catalpa Speciosa

from Indiana forests. *Guaranteed pure.*

JOHN P. BROWN, Carney, Ala.

APPLE, PEAR, PLUM, CHERRY SEEDLING STOCKS AND ROSA CANINA

Grown by DOORNBOSCH & SON, *Seedling Specialists*, Veendam, Holland, are second to none.

Contracts for 1912-13 delivery are now solicited and booked until Feb. 1, 1912. Get our prices—du ty, packing free on pier New York, Philadelphia, Boston or Baltimore.

THE HORTICULTURAL CO., Worcester, Mass. SOLE AGENTS FOR UNITED STATES AND CANADA

STILL a few APPLE SEEDLINGS ON HAND of 5-7 m/m and 7-12 m/m.

FOR SPRING 1912

We offer more than our usual supply of One and Two Year Apple Trees.

We still have a large lot of Scions to offer. Write for prices.

John A. Cannedy Nursery & Orchard Co.
Carrollton, Illinois.

ROSES

Booking orders for spring planting.

225 Varieties

OLD TRIED
NEW TRUE

THE LEEDLE FLORAL COMPANY
SPRINGFIELD OHIO

BOX STRAPS

AND CAR SEALS

WARD-DICKEY STEEL COMPANY

Manufacturers of Planished Sheet Steel
INDIAN HARBOR, IND.

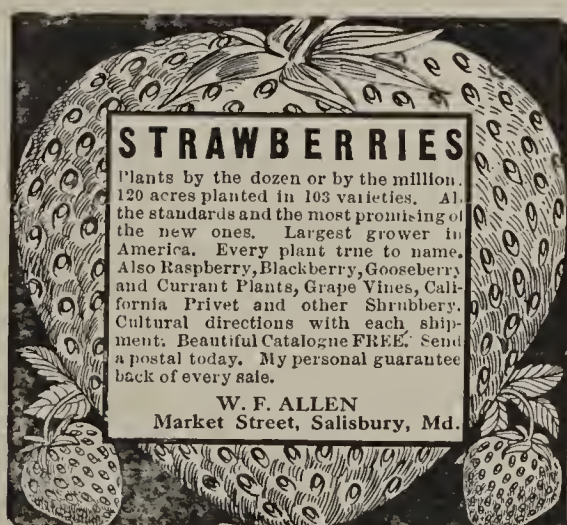
WE ARE way ahead of last year in the volume of our collection business; but still we can do yet more. Do not wait but send us now all your back accounts. Rates and methods on application.

NATIONAL FLORISTS' BOARD OF TRADE
56 Pine Street, NEW YORK

CALIFORNIA BLACK WALNUTS

We have a limited quantity of California Black Walnut Seed for sale. Write us for prices : : : : :

Chico Nursery Company, CHICO, CALIF.



STRAWBERRIES
Plants by the dozen or by the million. 120 acres planted in 103 varieties. All the standards and the most promising of the new ones. Largest grower in America. Every plant true to name. Also Raspberry, Blackberry, Gooseberry and Currant Plants, Grape Vines, California Privet and other Shrubbery. Cultural directions with each shipment. Beautiful Catalogue FREE. Send a postal today. My personal guarantee back of every sale.
W. F. ALLEN
Market Street, Salisbury, Md.



FRITSCH & BECKER
Seedmerchants
GROSS-TABARZ GERMANY.
SPECIALISTS IN
Forest Tree Seeds & Fruit Tree Seeds.
Offers on application.

We have an opportunity for a "live wire" with \$3000.00 to invest in the capital stock of an incorporated nursery in North Dakota and take a position as sales manager. Will pay a salary in proportion to results. Don't waste stamps unless you mean business. We will stand any inspection. Address "Investment," care of NATIONAL NURSERYMAN.

In writing to Advertisers, mention The National Nurseryman.

Blackberries.

prices.

Root cutting plants in three grades—Extra. No. 1 and No. 2. Write for varieties and prices.

W. B. COLE, Painesville, O.

THE SIMPLEX TREE BALER

BALES IN 22 STATES
PRICE, \$16.00

L. F. DINTELMANN, Belleville, Ill.

AMERICAN ELM

Choice trees from young blocks. Special prices on request.

J. W. McNARY, Dayton, Ohio,

Dayton and Xenia Nurseries.

OLYMPIC NATURE NURSERY

The Forest Conservatory

WILD FRUITS, FLOWERS AND EVERGREENS

Oregon Grape, Huckleberry, Salmonberry, Blackberry, Rhododendrons, Flowering Currants, Ferns, Madronas, Firs, and other Natives of the Pacific Northwest Coast.

JOEL SHOMAKER, Nellita, Washington

FRUIT STOCKS

We have a fine lot of Apple, Pear, Plum, Cherry and Quince Stocks in various grades to offer. All stocks of the best quality, and at prices that are right. Send for our price list.

Thomas Meehan & Sons

DRESHER, PENNA.

SURPLUS

FOR SPRING OF 1912

APPLES, three and four years. Many of them can be furnished in extra size. PEACHES, nice stock, leading kinds. KEIFFER PEARS, first class and extra. CHAMPION QUINCES, $\frac{1}{2}$ inch, first class and extra. JAPAN PLUMS, $\frac{1}{2}$ inch, $\frac{5}{8}$ and $\frac{3}{4}$. A large stock of extra fine ENGLISH WALNUTS, all sizes up to 8 ft.

A LARGE LINE OF :: ::

SHADE TREES, EVERGREENS
and SHRUBBERY.

Heavy on White Birch, Catalpa Speciosa, Horse Chestnuts, American Judas, American Linden, Lombardy Poplars, Sweet Gum, Tulips, Laburnums, Carolina Poplars, Bolleana Poplars and Salisburia. Oriental Plane, 8 to 10 ft., American Elm, 8 to 10 ft. and 10 to 12 ft., Retinospora Plumosa, Plumosa Aurea, Pisifera Aurea and Squarrosa Veitchii. Norway Spruce, all sizes from 2 to 8 ft. Altheas, Deutzias, Hydrangeas, Halesias, Spireas and Snowballs. Berberis Thunbergii, 12 to 18 in.

SEND LIST OF WANTS FOR PRICES

THE RAKESTRAW-PYLE CO.
KENNETT SQUARE, PA.

BEAUTIFUL

FOR SPRING
SHIPMENT

SCOTCH GROWN STOCK

HORSE CHESTNUTS, $3\frac{1}{2}$ to $4\frac{1}{2}$ ft., splendidly rooted, straight and clean.

Scotch or Wych. Elm Stocks, 3 to 4 ft.

.. .. 4 to 5 ft.

Norway Maple, 3 to 4 ft. and 4 to 6 ft., extra heavy.

Norway Spruce Firs, 9 to 12 ins., twice transplanted

.. .. 12 to 18 ins., ..

For prices and full information apply to

JOHN PALMER & SON, Ltd., Annan, Scotland
or H. Frank Darrow, P.O. Box 1250, N. Y. City

Sole Agent for U. S. and Canada

WANTED

One-year Wistaria, Clematis, Hall's Honey-suckle, Bignonia and other vines, also 3 year and GOOD 3-4 ft. Hydrangea P. G., home grown. Send me your surplus lists.

Fred Haxton, 4717 Winthrop Ave., Chicago

POSITION WANTED

By March 1st as foreman and propagator with reliable and well-established nursery firm. 25 years' experience in growing and propagating all kinds of nursery stock under glass and outdoors in the East and Northwest. Used to handling large force of men. Best of reference Address No. 42, care of NATIONAL NURSERYMAN.

NURSERY SALES MANAGER

WANTED in Ontario to manage sales department of nursery employing three hundred agents. Must be very well qualified and able to prove it. A very desirable and permanent position for the right party. Answer to Box W, NATIONAL NURSERYMAN.

WANTED

An experienced man in the retail nursery business, to accept position of secretary of an established nursery in a city of 100,000 in the middle west. Good opening with bright future for the right man. Sales run \$75,000 to \$100,000 per year.

Address "H", care of NATIONAL NURSERYMAN.

FOR SALE

Well established nursery consisting of about 30 acres of growing stock and equipment, located near Indianapolis, Ind. This location offers a splendid opportunity to the right party, to operate as an individual or branch nursery. For further information and terms write W. C. H., care NATIONAL NURSERYMAN.

WANTED

Landscape Architect. Thoroughly practical in all Branches' Must be good correspondent. Apply with references.

L. L. MAY & CO., St. Paul, Minn.

A New England Nursery, for forty years a money-maker, is for sale at a price far below wholesale value of the stock in it, and with good will thrown in. A big population to serve and the least possible competition. Owner's time fully occupied with other pursuits. Don't inquire unless you mean business. Address R, care of National Nurseryman.

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Fumigation with Hydrocyanic Acid Gas Generated From Cyanide $\frac{98}{99}\%$

Is the only positive eradicator of San Jose
Scale and other Insect Pests. Endorsed
by all agricultural experiment stations.

Manufactured by
The Roessler & Hasslacher Chemical Co.
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For SPRING 1912

Grape Vines, Currants and Gooseberries
in all varieties and Grades

— also —

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

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FRUIT AND SEED FARMS

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GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all re-cleaned and guaranteed
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Correspondence solicited. Price list upon request.

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W. C. REED, Prop.

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Specialties for late fall shipment. Special prices
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PEACH, one year, general assortment; all leading
varieties, car lots or less.

CHERRY, two year $\frac{3}{4}$ up, extra fine; also lighter
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Tartarian, Napoleon, etc. Also fine lot of Sweets one
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SILVER MAPLES, 10 to 12 ft., 8 to 10 ft., 6 to
8 ft.

5,000,000

SEEDLINGS and TRANSPLANTS
WHITE PINE and other CONIFERS

DELIVERY SPRING, 1912

The North-Eastern Forestry Co.
NEW HAVEN, CONNECTICUT

E. T. DICKINSON,

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Grower and Exporter of

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Tree Stocks. All grown for the American trade.

PEAR AND CRAB APPLE SEED,

The most complete assortment of Ornamental Stocks,
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Meneray-Crescent Quality Stock

For shipment in the Spring of 1912, we offer a varied line—
everything well grown and the best in every respect. Our facili-
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We are the sole United States and Canadian agents of SEBIRE-
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the quality of the stock is unexcelled.

Send Your Complete List of Wants for a Special Quotation.

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FOCKO BOHLEN

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HALSTENBEK

(Holstein-Germany) near Hamburg

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HEDGE PLANTS

FRUIT STOCKS

ROSES, Etc.

The largest stocks to offer in first-class condition at lowest
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Best shipping facilities via Hamburg.

General Price-List free on application.

LARGE STOCK OF
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SHADE AND ORNAMENTAL TREES.

APPLE GRAFTS MADE TO ORDER

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We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
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PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready end of September.

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All stock is of the highest quality and carefully graded. It is in storage, ready for early shipment.

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PLUM

ARBOR VITAE, up to 4 ft.

BARBERRY, in variety

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NORWAY SPRUCE, up to 3 ft.

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SNOWBERRY, red and white

VIBURNUM, common only

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in quantities for retimbering or lining out; healthy stocks, from the very extensive and well kept Wholesale Nurseries of

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and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

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**THE LATEST
SILVER MEDAL ROSE**

The new Sargent rose, originated by Jackson Dawson, now offered for the first time for fall 1912 delivery.

As this stock is limited, book your orders early.

OTHER ROSES ORIGINATED BY JACKSON DAWSON:

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WM. EGAN and MINNIE DAWSON

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EASTERN NURSERIES

1090 Center St.

HENRY S. DAWSON, Mgr.

Jamaica Plain, Mass.

J. H. SKINNER & CO.

Station "A," Topeka, Kansas.

**Fruit, Shade and
Ornamental Trees**

∴ FLOWERING SHRUBS ∴
APPLE AND PEAR SEEDLING
∴ FOREST TREE SEEDLING ∴

35TH YEAR

Pan Handle Nurseries

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
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Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
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Small Fruits	Syringaeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

J. K. HENBY & SON

GREENFIELD, IND.

WE OFFER

PEACH TREES

IN COMMERCIAL VARIETIES

NORWAY MAPLE,

SILVER MAPLE

CALIFORNIA PRIVET,

2-year

The Greenbrier Nursery Co., Inc.

Greenbrier, Tenn.

F. DELAUNAY

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GROWER AND EXPORTER OF

Apple, Quince, Cherry, Pear, Plum, Peach,
Stocks, Forest Tree Seedlings,
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Rosa Manetti, Multiflora, etc.

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For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

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SPECIALLY:

DOUGLAS FIRS, JAPANESE AND COMMON LARCHES, SITKA-BLUE-NORWAY SPRUCES, ETC., are grown and offered in large quantities by

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Special prices and particulars on application



Everything in

SMALL FRUIT PLANTS

100,000 Transplanted Raspberry Plants

Ask for price list.

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ROSES and SHRUBS

Alba Rubifolia	2 yr.
Alberic Barbier	2 yr.
American Pillar	3 yr.
American Pillar	2 yr.
Dorothy Perkins	2 yr.
Dr. W. Van Fleet	1 yr.
Farquhar	2 yr.
Hiawatha	2 yr.
Lady Gay, 4 to 6 ft.	2 yr.
Manda's Triumph	2 yr.
May Queen	2 yr.
Prairie Queen	2 yr.
Ruby Queen	2 yr.
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Violet Blue	2 yr.
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Altheas, 8 kinds, all sizes
Berberry, from cuttings
Deutzias, 5 kinds
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Viburnums, Opulus and Plicatum

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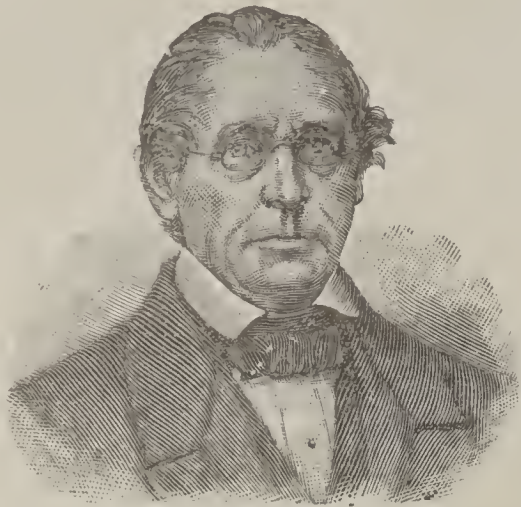
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Small Fruit Plants for the Nursery Trade, Spring 1912

Black and Purple Raspberry Tips, Red Raspberry, Blackberry, Dewberry, Gooseberry Layer Plants, Orange Quince, Gooseberry and Currant Cuttings, Asparagus, Horseradish. Rhubard 1 and 2 year old Roots, also divided Roots. Write for prices.

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*ESPECIALLY PREPARED FOR
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Put up in boxes containing 20 balls. Also furnished on cones and tubes unbleached. This yarn is so wound that it can readily be soaked in hot wax, and so twisted that it is strong enough to wrap without breaking, yet is easily broken when the winding is completed.

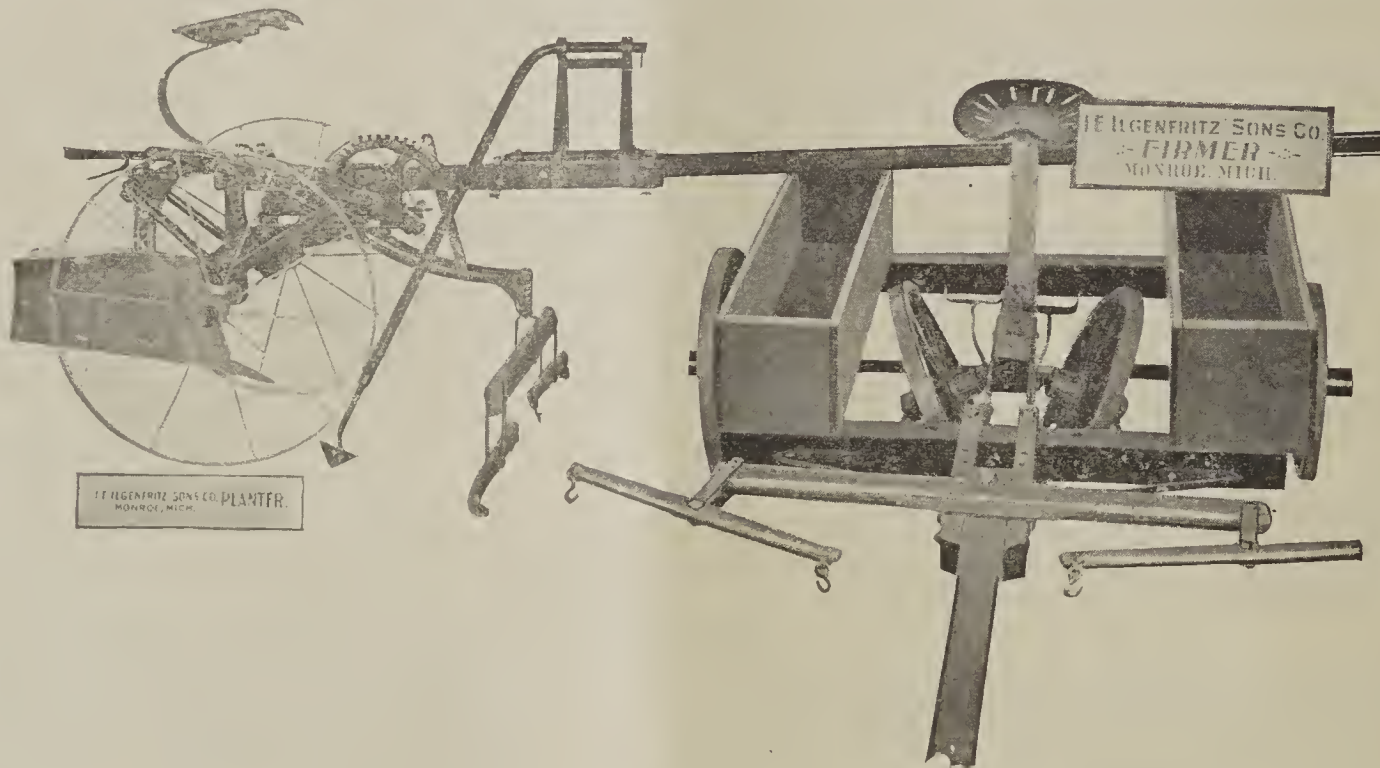
Also a Special Twine on tubes, balls and cones for the Reed-Bell Graft Wrapping Machine. Samples and prices furnished upon request.

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Dept. F.,
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I. E. ILGENFRITZ' SONS CO. PLANTER AND FIRMER

Great
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Saving
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men



Better
and
More
Uniform
Stands
of Stocks
Grafts
Cuttings
Etc.
at Less
Cost

Write for descriptive circular with testimonials from leading nurserymen of 17 states of the Union.

If they can't get along without them can you?

TAKE THIS MATTER UP AT ONCE. Have machines for spring planting.

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The Monroe Nursery, - - Monroe, Mich.

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For all information as to Stocks, prices, terms, etc., address

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Northern Grown Nursery Stock

We Grow a General Assortment of Trees, Shrubs, Vines, Roses and Herbaceous Perennials, Etc.

Prices Reasonable. Wholesale Trade List for the Asking.

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ROSES

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A FULL LINE OF HARDY NURSERY STOCK

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Rhododendrons, Hardy Hybrids, named in the best modern American varieties, *Andromeda florabunda*, *Ericas*, *Azaleas*, *Kalmia latifolia*, and other American plants.

Pinus Cembra, *Retinosporas* in variety, Box in variety, Golden Privet, Copper Beach, and other ornamental Trees and Shrubs.

Roses in variety, Standards or Bushes.

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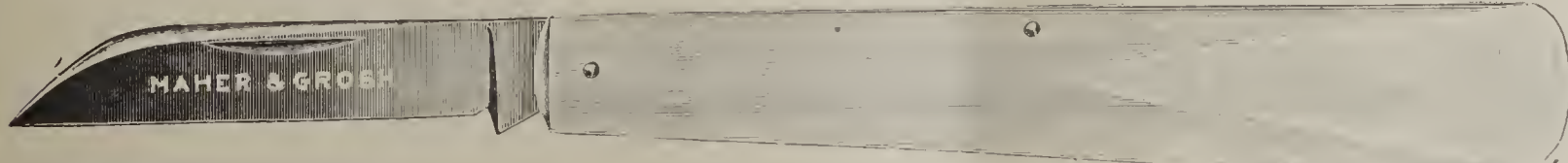
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BUDDING KNIFE No. 94. Sample by mail, 25c; 6 for \$1.25.



PROPAGATING KNIFE No. 89½, 50c. Blade Closes. You have paid 75c for a much poorer knife.

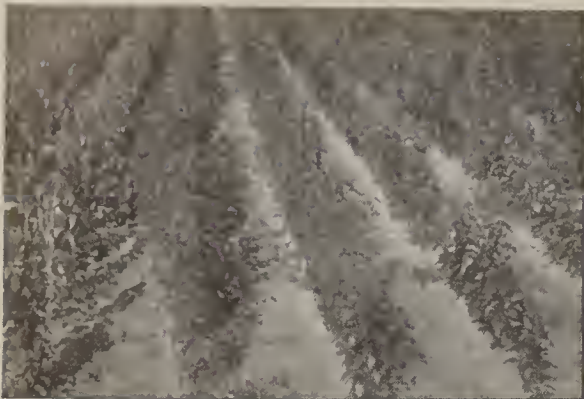
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Send for 12-page Special
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When writing to Advertisers please mention The National Nurseryman.



Partial View of Persimmon Trees in Nursery, shown in our Retail Catalogue, page 23.

PERSIMMONS PRIVET ARBORVITAE Florida-Grown True to Name

Your trade will be quick to see the value of Glen Saint Mary stock—our methods of propagating assure quality and satisfactory results, and much of our product will succeed practically all over the North. Let us know your wants—we'll gladly supply prices and particulars on request.

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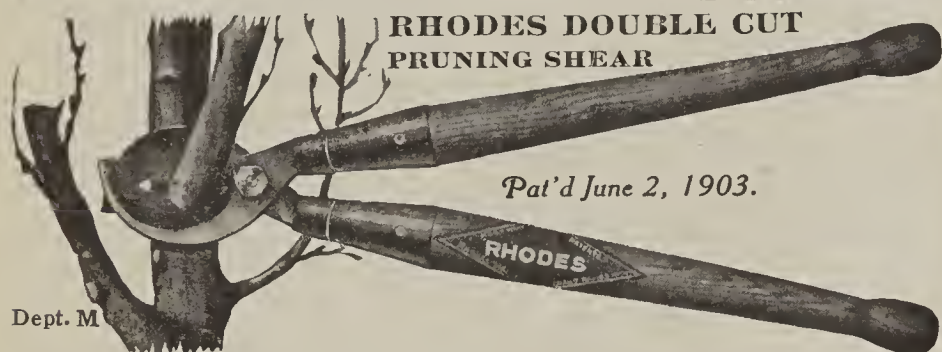
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Our Phlox novelties **Rynstroom** and **Abel Tasman** deserve your attention.

Special quotations on Apple Stocks, Rhododendrons, Azalias, Roses, etc.

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The only pruner made that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes. We pay express charges on all orders. Write for circulars and prices.

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Grown on new land from French Crab Seed. Free from Aphis and Knot. Write us for prices, stating quantity and grade wanted.

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Offer for Spring 1912: Peach, Pear and Cherry, 1 and 2 year; Pear Seedling. Also California Privet, 1 and 2 yr.; extra fine. Send us your lists for quotations.

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Conifers and Broadleaved Tree and Shrub Seeds

GUARANTEED FRESH, TRUE TO NAME AND OF
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Winfield Jt., LONG ISLAND

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HIGH GRADE FRUIT AND ORNAMENTAL
TREES, SHRUBS, ROSES AND
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We grow everything required for Orchard, Garden,
Lawn and Landscape Planting.

Catalog and Trade-list on application.

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LARGE SURPLUS AT CUT PRICES

FOLLOWING ARE NO. 1 STRONG PLANTS:

15,000 Mersereau Blackberry Plants, 25,000 Snyder Blackberry Plants, 20,000 Early Harvest Blackberry Plants, 25,000 Red Raspberry, Miller, King, etc., 100,000 Black Cap Raspberry—Hoosier, Kansas, Cumberland, Plum Farmer, etc., 850,000 Blackberry Root Cuttings, all standard varieties.

All of above stock is strong-rooted, new-ground grown and we will sacrifice one-half on price if sold at once.

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Capacity 200,000 Per Day

Prompt Deliveries Our Specialty

WOOD TREE AND POT LABELS

Iron or copper wired, printed, painted and plain.
Everything made of wood for nurserymen or florists.
No order too large or too small for prompt execution.

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FRUIT STOCKS AND BRIARS

Million in Stock Seedlings and transplanted. All healthy, stout and rooted stuff, very cheap

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Selected sorts. Astonishing cheap prices on application.
 Best shipping facilities via Hamburg at special freight rates

HUGO LOPAN, Pinneberg, near Hamburg, Germany

DOWNING GOOSEBERRIES W. B. COLE

Large Stock, 1 and 2 years

Painesville, O.

A BARGAIN IN STANDARD PEARS
 Extra size, 6 to 7 ft.; 1 inch and up 5 to 6 ft.; 3-4 and up. Mostly Bartlett.

Can also furnish a few of the leading varieties.
 It will be worth while to get our prices before buying elsewhere
 Address,

PIONEER NURSERIES COMPANY,
 Salt Lake City, Utah.

For Special
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Address
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We offer for Fall and Spring delivery the largest and most complete stock of **GRAPE VINES** in strong grades for nurserymen and dealer's trade.

We also have an extra fine block of President Wilder currants which have made a strong growth.

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BENJ. CONNELL, Florist and Grower
 MERCHANTVILLE, N. J. SPECIALTIES: Ampelopsis Veitchii
 Clematis Paniculata, 2 and 3 year old and seeds of same.
 500,000 CALIFORNIA PRIVET, all sizes. Write me.

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Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our **HOLLAND NURSERIES**. Some of the goods on hand here during the packing season.

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We have in surplus several hundred thousand **RED OAK** seedlings, 6 to 12 inches and 12 to 18 inches for fall or spring shipment. Let us quote you prices and send samples.

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Best varieties at reasonable prices. Also grape vine and other fruits
JOHN LIGHTFOOT, East Chattanooga, Tenn.

**Peach Trees
 and Strawberry Plants**

all leading market sorts for Spring 1912

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**APPLE AND PEACH.
 LARGE STOCK.**

FINE TREES
 Prices Reasonable

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We offer the Wholesale Trade for 1912

5,000 California Privet, one year old
 5,000 " " four " heavy branched
 200,000 " " two " "
 30,000 Upright Iboya Privet, one year old
 10,000 King Humbert Cannas

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**CATALPA BUNGEI
 SILVER MAPLES**

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 Painesville, O.

EASTERLY NURSERY CO.
 CLEVELAND, TENN.

OFFER FOR SPRING, 1912

One and two year Apple; One year and June Bud Peach; California Privet, in car-load lots. Also Magnolia, Grandiflora, Arbor-Vitea, Norway Spruce, Md. Plantier, and Baltimore Bell Roses. Ask for prices.

P-W-R

ARSENATE OF LEAD

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Supplied by Wholesale Druggists and other Dealers throughout the U. S.

Powers-Weightman-Rosengarten Co.

Manufacturing Chemists

FOUNDED 1818

NEW YORK

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Apple Seedlings

AMERICAN OR FRENCH GROWN
STRAIGHT OR BRANCHED ROOTS
WELL MATURED, GOOD GRADES
CAREFULLY HANDLED

APPLE GRAFTS MADE TO YOUR ORDER

ANY STYLE OR LENGTH TO SUIT PURCHASER

OVER FORTY YEARS' EXPERIENCE

Write for Winter Wholesale Trade List

THE SHENANDOAH NURSERIES

D. S. LAKE, Prop.

SHENANDOAH, IOWA

Franklin Davis Nursery Co.

BALTIMORE, MD.

WE OFFER FOR SPRING 1912

APPLE—1 and 2 year; heavy on York Imperial, Stayman's Winesap, Grimes Golden, Rome Beauty, and other standard varieties in 1 year old.

PEACH—General assortment.

CHERRY—1, 2 and 3 year; some heavy trees.

PEAR—STANDARD, Kieffer, 1 year.

ASPARAGUS—1 and 2 year.

CALIFORNIA PRIVET—1, 2 and 3 year, in carload lots—fine.

ORIENTAL PLANES.

CAROLINA POPLARS.

NORWAY and SILVER MAPLES.

RHUBARB—1 and 2 year.

We also have a general line of other stock. Send us your WANT LIST. We need your orders.

We want PEACH SEED (NATURALS)

SIMPSON

is the name of the men who grow the finest

CHERRY

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

TREES

CHERRY—3-yr., 2 inch up, 7 to 9 feet, for high-class retail trade

APPLE—1 year and 2 year.

H. M. Simpson & Sons
VINCENNES, INDIANA

For Winter and Spring Orders

WE OFFER THE FOLLOWING FROM OUR MAC CLENNEY NURSERY . . .

4000 Mulberries, mostly of Hicks variety, smooth and free from blight.

15000 Figs, mostly of the Celeste and Lemon varieties.

20000 Peach, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.

25000 Plum on Plum, Abundance, Burbank, Wickson, Red June, Gonzalez, and other leading sorts. Sizes 1/2, 5/8, 3/4 and 1 inch.

10000 Roses, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.

6000 Biota Aurea Nana, sizes 18 inches up.

10000 Biotas and other Conifers, 12 inches and up. Conifers can be balled or shipped with naked roots.

25000 Chinese Arborvitae Seedlings, 2 and 3 year, 6 inch to 3 ft. sizes.

5000 Muscadine Grapes.

20000 Trellis Varieties Grapes.

70000 Camphor Trees, sizes 1 to 3 ft.

3000 Pot Grown Eucalyptus, sizes 3 to 5 ft.

4000 Oriental Plane, sizes from 4 to 12 feet.

3000 Texas Umbrella, sizes from 4 to 8 feet.

2000 Oleander. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.

Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

The Griffing Brothers Company
JACKSONVILLE, FLORIDA

FRUIT TREES

(ENGLISH GROWN)

OVER HALF A MILLION
TO SELECT FROM

APPLES: Maidens, Bushes and Half-Standards are a leading feature with us. 250,000 in stock.

PLUMS AND PEARS. Enormous stock in leading kinds.

CHERRIES, Peaches, Nectarines and Apricots in heavy quantities.

Fruit Trees are our leading line.

Inspection invited to nurserymen visiting England. Our nurseries are only ten miles by rail from London.

List of varieties grown and quotations sent on application. We have no agents. Write direct to

S. SPOONER & SONS

**Fruit Tree Growers and Nurserymen
HOUNSLOW, ENGLAND**

Seedling and Transplanted Evergreens by the million

Arbor Vitae

Austrian Pine

Black Hill Spruce

Colo. Blue Spruce

Concolor

Engelmanii Spruce

Jack Pine

Norway Spruce

Pinus Ponderosa

Scotch Pine

White Pine

White Spruce

We have these in all sizes and ages. Also a general line of nursery stock.

Evergreen price list now ready.

**SHERMAN
NURSERY COMPANY**

CHARLES CITY, IOWA

Cyclopedia of American Horticulture

L. H. BAILEY

IN FOUR VOLUMES

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218 Livingston Building

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Order your Stock of
Himalaya Plants
From the Original Grower

YOU'VE been reading about the hardy perennial Himalaya Berry and its wonderful fruit—entirely different from, and finer, better, more abundant than blackberries. Your customers have been reading about it, too. "Himalaya facts" that have been telling about in my advertisements have made new friends for me and for Himalaya in every state.

Thousands of people are buying Himalaya Berry plants from me; thousands more, who buy other things from you, also will buy Himalaya plants from you if you can make sure they are getting the genuine, hardy stock grown by Mitting.

**I Introduced Himalaya Berry
and am a Berry Specialist**

No other grower produces Berry plants only; many grow them extensively, but *I am the only nurseryman who gives his attention exclusively to Berries.* You can supply my Himalaya plants and my other leaders—Gooseberries, Currants, Raspberries, King Edward Strawberries—with *absolute assurance* to your customers that you're supplying genuine stock, right from the producer's own place.

My big retail trade is going to take the major part of my stock, but I can wholesale a limited quantity of choice plants—I burn all other kinds. Write for prices now. Make your reservations early. First come, first served, and with Himalaya especially, there is a tremendous demand that is going to exhaust the supply before the season is over.

Berrydale Experiment Gardens

NATIONAL AVE., HOLLAND, MICH.



THE HIMALAYA GIRL

Harrison's Nurseries

J.G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Peach, Apple
Concord Grape
Asparagus Roots
Kieffer Pear

Our
Leaders
for
January

Plum, Cherry
Moore's Early Grape
Strawberry Plants
Other Standard Pears

Tree-selling will begin to look up from this month on, and right away quick you want to know where to get the best lines of such stock as you'll have to buy.

Harrison's Nurseries are on the spot, as usual, with trees that you can depend upon, that you can sell at a good profit, and sell with the knowledge that they will "make good" for your trade.

A partial list follows—revised up to December 5th, and offered subject to previous sale. Write for full particulars and prices. There's going to be a shortage of a good many lines this year—as you already know. Send your orders early, and we'll reserve select stock for you, shipping whenever you wish.

WHOLESALE SURPLUS LIST

APPLE, two-year

6-7 ft. 5-6 ft. 4-5 ft. 3-4 ft.						6-7 ft. 5-6 ft. 4-5 ft. 3-4 ft.						6-7 ft. 5-6 ft. 4-5 ft. 3-4 ft.					
1 in. $\frac{1}{16}$ -1 in. $\frac{3}{8}$ - $\frac{1}{2}$ in. $\frac{1}{2}$ - $\frac{3}{4}$ in. $\frac{3}{4}$ -1 in.						1 in. $\frac{1}{16}$ -1 in. $\frac{3}{8}$ - $\frac{1}{2}$ in. $\frac{1}{2}$ - $\frac{3}{4}$ in. $\frac{3}{4}$ -1 in.						1 in. $\frac{1}{16}$ -1 in. $\frac{3}{8}$ - $\frac{1}{2}$ in. $\frac{1}{2}$ - $\frac{3}{4}$ in. $\frac{3}{4}$ -1 in.					
Ben Davis.....	500	2000				Late Raspberry....		100	100	100	100	Scott's Winter.....			100	100	100
C. R. June.....	50	200	200	100	100	Lankford.....	50	50	50	50	50	Senator.....			100	50	50
Cooper's Market...	50	100	100	100	100	Mann.....		100	100	100	100	Smith's Cider....			100	100	50
Coffelt Beauty....	50	100	100	50	50	Missouri Pippin...	100	200	200	200	100	Springdale.....			100	100	100
Early Harvest.....	50	500	200	200	200	Myrick.....	100	300	300	100		Spitzenburg.....				200	200
Ensee.....		100	200	200	100	Opalescent.....		200	100	100	100	Stark.....	100	500	500	500	500
Fourth o' July....	50	100	100	100	100	Paynes Late Keeper		100	200	100	100	Walbridge.....				100	100
Gano.....	100	100	100	500	500	Red Astrachan....	200	1000	1000	1000		Winesap.....			200	200	200
Ingram.....		150	150	50		Salome.....	50	100	100	100	100	Yellow Transparent	100	1000	1000	1000	1000

APPLE, one year

5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft.					5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft.					5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft.				
Aikin Red.....	150	150			Golden Sweet.....	200	100	100	100	Smith's Cider....	200	200	200	200
Alexander.....	100	100	100	100	Golden Beauty....	500	500	500	500	Spitzenburg.....	1000	1000	1000	1000
A. G. Russett....	1000	1000	100	100	King.....	500	500	500	200	Stark.....	12000	4000	1000	1000
Baldwin.....	12000	12000	1000	1000	Mann.....	200	200	100	100	Sweet Bough....	100	100	100	100
Ben Davis.....	12000	2000	2000	1000	Missouri Pippin...	200	200	100	100	Tallman Sweet...	200	200	100	100
C. R. June.....	200	200	200	200	N. W. Greening....	500	500	500	500	Winesap.....	2000	5000	5000	5000
Duchess.....		1000	1000	1000	Nero.....	5000	3000	1000	1000	Winter Banana...	500	500	500	500
Early Harvest....	2000	2000	500	500	P. W. Sweet.....	200	200	200	200	Yellow Transparent	5000	5000	2000	2000
Fallawater.....	1300	300	300	100	Red Astrachan....	8000	4000	1000	1500	York Imperial....	2000	2000	2000	1000
Gano.....	1000	2000	1000	1000	R. I. Greening....	2000	2000	1000	500					

PEACH

5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft. 1-2 ft.						5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft. 1-2 ft.						5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft. 1-2 ft.					
$\frac{3}{8}$ - $\frac{3}{4}$ in. $\frac{1}{2}$ - $\frac{3}{8}$ in. $\frac{3}{8}$ - $\frac{1}{2}$ in.						$\frac{3}{8}$ - $\frac{3}{4}$ in. $\frac{1}{2}$ - $\frac{3}{8}$ in. $\frac{3}{8}$ - $\frac{1}{2}$ in.						$\frac{3}{8}$ - $\frac{3}{4}$ in. $\frac{1}{2}$ - $\frac{3}{8}$ in. $\frac{3}{8}$ - $\frac{1}{2}$ in.					
Harrison Cling..	200	100	100	100	100	Heiley's	200	200	200	200	200	Prize	100	100	100	100	100
Bray's Rare Ripe	50	100	100	100	100	Krummels	200	200	200	200	200	Salway	200	200	200	200	200
Belle Georgia....	1000	1000	1000	1000	1000	Levy's Late.....	100	100	100	100	100	Stephen's R. R..	200	200	200	200	200
Connetts	200	200	200	200	200	Mt. Rose.....	200	200	200	200	200	Stump	200	200	200	200	200
Denton.....	200	200	200	200	200	Moore's Favorite	200	200	200	200	200	Slappy	100	100	100	100	100
Elberta.....	3000	3000	3000	3000	3000	McCollister	100	100	100	100	100	Triumph	100	100	100	100	100
Fitzgerald	100	100	100	100	100	Niagara	100	100	100	100	100	W. H. Cling.....	100	100	100	100	100
Fox Seedling....	200	200	200	200	200	Piquetts	100	100	100	100	100						

CALIFORNIA PRIVET

1,000 6 to 7 ft.	10,000 2 to 3 ft.
5,000 5 to 6 ft.	20,000 18 to 24 in.
10,000 4 to 5 ft.	25,000 12 to 18 in.
20,000 3 to 4 ft.	10,000 6 to 12 in.

PEAR

	1 in.	6-7 ft.	5-6 ft.
		$\frac{3}{4}$ in.	$\frac{5}{8}$ in.
Kieffer.....	1000	8000	3000

GRAPES—two-year transplanted

25,000 Concord
20,000 Moore's Early

ASPARAGUS

Two-year Asparagus Crowns, choice plants.

CHERRY

	5-6 ft. $\frac{3}{4}$ in.	4-5 ft. $\frac{5}{8}$ in.	3-4 ft. $\frac{1}{2}$ in.	2-3 ft. $\frac{3}{8}$ in.
Baldwin.....	100	100	50	
Black Tartarian...	500	300	100	
Belle DeChoicey...	50	50		
Early Richmond...	1000	1000	1000	1000
Gov. Wood.....	500	300	100	50
Napoleon.....	200	200	100	
Yellow Spanish....	100	100		

American Elm—

50 8 to 10 feet high, $1\frac{1}{4}$ in.
500 6 to 7 feet high, 1 in.

American Linden—

50 8 to 10 ft. high, $1\frac{1}{4}$ in.
50 6 to 7 ft. high, 1 in.

Norway Maples—

25 12 feet 3 in.
50 12 feet 2 in.
1000 10 ft. high, $1\frac{1}{2}$ in.
2000 8 to 10 ft. high $1\frac{1}{4}$ in.
2000 6 to 7 ft. high, 1 in.
200 Silver Maples, 4 in.
200 Silver Maples, 3 in.
500 12 ft. high, 2 in.
1000 10 ft. high, $1\frac{1}{2}$ in.
1000 8 to 10 ft. high, $1\frac{1}{4}$ in.
1000 6 to 7 ft. high, 1 in.

Box Elder—

500 8 to 10 ft. high, $1\frac{1}{4}$ in.
1000 6 to 7 ft. high, 1 in.

Catalpa—

500 8 to 10 ft. high, $1\frac{1}{4}$ in.
500 6 to 7 ft. high, 1 in.

TREES AND SHRUBS

Russian Mulberry—

300 8 to 10 ft. high, $1\frac{1}{4}$ in.
500 6 to 7 ft. high, 1 in.

Altheas (Assorted)—

200 2 to 3 ft.
400 3 to 4 ft.
500 4 to 5 ft.

Sugar Maple—

500 10 ft. high, $1\frac{1}{2}$ in.
1000 8 to 10 ft. high, $1\frac{1}{4}$ in.
1000 6 to 7 ft. high, 1 in.

Black Walnuts—

200 6 to 7 ft.
500 5 to 6 ft.
1000 4 to 5 ft.
1000 3 to 4 ft.

Baby Rambler Rose—

1000 3 yr.
200 Rosa Rugosa, 3 to 4 ft.
200 Rosa Rugosa, 2 to 3 ft.
Colors: Red, White and Pink.

EVERGREENS (burlapped)

American Arborvitae—

100 5 to 6 ft.
300 4 to 5 ft.
300 3 to 4 ft.

Colorado Blue Spruce—

25 4 ft.
25 2 ft.
500 1 ft.

Koster Blue Spruce—

50 30 in.
200 24 in.
200 15 in.
1000 12 in.

Hemlock Spruce—

100 6 ft.
100 5 ft.
100 4 ft.

Norway Spruce—

100 5 to 6 ft.
500 4 to 5 ft.
1000 3 to 4 ft.
1000 2 to 3 ft.
2000 18 to 24 in.
2000 12 to 18 in.

Pyramidal Arborvitae—

1000 4 to 5 ft.
1000 5 to 6 ft.
500 6 to 7 ft.

Rhododendrons, Assorted.
Azaleas, Assorted.

STRAWBERRY PLANTS BY THE MILLION. WRITE FOR LIST.

Harrison's Nurseries
J.G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa

W. P. HUMPHREY, PRINTER, GENEVA, N. Y.



THE NATIONAL NURSERYMAN



FEBRUARY, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SP. RAE A VAN HOUTTEI
by the thousand.

Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

Complete line General Nursery Stock for whole-
sale trade. Unsurpassed storage facilities.

Large stock in storage, free from winter injury.

APPLE, CHERRY, PEACH, BARTLETT and B. deANJOU
PEAR, BLACKBERRIES, root cutting plants, CURRANTS,
GRAPE VINES, CAROLINA POPLAR, ELM, SILVER
MAPLE, CALIFORNIA PRIVET.
ROSES. APPLE GRAFTS. APPLE SEEDLINGS.

ASK FOR SPRING TRADE LIST

1,000,000 POPLAR

Norway and Carolina

We offer this year the largest stock of northern-grown
Poplar, Box Elder, Soft Maple and other hardy shelter
belt stock to be found in the country.

A fine stock of **ONE-YEAR APPLE**, said to be one
of the best stands in the country this year, McIntosh,
Jonathan, Rome Beauty, etc., etc.

Write us for prices on carload lots.

The Jewell Nursery Co.

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Young Roses *for* Nurserymen

Clean

Healthy

Thoroughly Established

Our Roses lead in quality of stock and excellence of variety, having been selected from the very best of the newer bedders, which added to the choicest of standard sorts, gives an ideal assortment especially suited to lining out.



Summer Propagated, Winter Rested Roses

Send us your list early and allow us to make
you quotations.

THE E. G. HILL CO., Richmond, Ind.

NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the
United States at the

Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and
Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms
and other tender Greenhouse Plants

Have a large stock stored in frost proof cellars that can be shipped at any time desired;
switch from N. Y. C. lines direct into our packing house; can load without exposure.
Unsurpassed facilities for handling orders large or small. Catalogs and price lists free.

A few specials while they last:

STANDARD PEARS in assortment DUCHESSE DWARF PEARS BOURGEAT QUINCE
PRUNUS PISSARDI and TRILOBA CUTHBERT AND OTHER RASPBERRIES
CONCORD AND OTHER GRAPES



DOUBLE-FLOWERING THORN

Our Specialties are: Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

AMERICAN

ELMS...

SPLENDID TREES

Sizes one to two inches caliper

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

ANNOUNCEMENT

January Bulletin has been mailed to the trade. Those entitled to receive a copy should insist on having one. It will be mailed cheerfully and promptly on receipt of request. The Bulletin shows what we have to sell this Spring and includes some attractive offers of STANDARD and DWARF APPLES, QUINCES, PEACHES and other fruit trees: small fruits and a fine lot of ornamentals like TREE HYDRANGEAS, TREE LILACS and other flowering shrubs in standard form: ROSES—our long suit—including some especially fine Crimson Rambler, Baby Rambler, Blue Rambler, White Dorothy Perkins, H.Ts, H.Ps—in short lots of good things. Also APPLE SEEDLINGS, in all grades, and FRENCH and VERMONT APPLE SEED. This is quite a lot of talk to put into so small an amount of space, but we have lots of things to talk about. Buyers are invited to tell us their wants and we will talk to the point with attractive prices on the goods known very generally as "THE PREFERRED STOCK."

JACKSON & PERKINS COMPANY

"Purveyors to the Trade"

NEWARK, Wayne Co., NEW YORK

February 1st

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's worth it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.

INCORPORATED

Fruitland Nurseries

AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.

CONIFERS
BROAD-LEAVED
EVERGREENS
DECIDUOUS
SHRUBS
WEEPING
MULBERRY
PEACHES
OTHER FRUITS



Biota Japonica Filiformis.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

Hill's Evergreens

SEEDLINGS and
TRANSPLANTS

Large Stock Honest Prices

DECIDUOUS FOREST TREE SEEDLINGS

Grown in immense quantity.

SPRING TRADE LIST NOW READY.

IF YOU DON'T RECEIVE YOUR COPY, LET US KNOW

D. HILL NURSERY CO.

D. HILL, *President* Evergreen Specialists
LARGEST GROWERS IN AMERICA
Founded 1855 Box 803, DUNDEE, ILL.

C. M. HOBBS & SONS

BRIDGEPORT, IND.

APPLE—1, 2 and 3 year in leading sorts.

CHERRY—1 and 2 year fine stock.

PEAR—1 and 2 year in leading sorts.

PLUM—1 and 2 year Japan, European and native sorts.

PEACH—1 year leading sorts.

PRIVET—1 and 2 year fine stock.

SHADE TREES in car load lots Norway Maple, American Elm, Box Elder, Silver Maple, etc.

We also have a general line of other stock not mentioned above.

WANT LISTS INVITED.

Jonathan

Gano

Ben Davis

AND OTHER LEADING SORTS IN CARLOAD.
Fine assortment of Apple in 2-year Grafts and 1-year Buds.

CHERRY, 1 inch up; $\frac{3}{4}$ to 1 inch; $\frac{5}{8}$ to $\frac{3}{4}$,
and all under grades.

KIEFFER-GARBER, and assorted pear in
all grades.

A carload of $\frac{3}{4}$ foot, 2-year, California Privet at a bargain. This is a fine lot.

TEXAS UMBRELLA TREE--

CATALPA SPECIOSA,

in large quantity, 4 to 6, 6 to 8, 8 to 10.

If you don't receive our January Surplus List ask for it.

WAXAHACHIE NURSERY CO.

J. R. MAYHEW, President
WAXAHACHIE, TEXAS

Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries
Huntsville, Ala.
JESSIE S. MOSS, Prop.

We offer for Spring of 1912 in large quantities as usual:

SPECIALTIES

APPLES—Commercial varieties, one year, in large supply. As fine in quality as ever grown.

PEARS—Kieffers, one and two years old. A much smaller crop than heretofore.

CHERRIES—On Mazzard. One year. Bing, Lambert, Napoleon, Black Tartarian.

CHERRIES—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

ROSES—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

PRIVET—Amoor River. Retains its foliage longer and holds its color better than California Privet.

MAGNOLIA G. F.—Huntsville grown. Handsome, young plants, transplanted.

See Price List for particulars.

Address, W. F. HEIKES, Manager,
HUNTSVILLE, ALA.

Have you seen and examined the quality and finish of our

Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

SMALL STOCK

FOR PLANTING
IN NURSERY ROWS

We have a large assortment of this stock to offer this year. It is all first class stock that will give the best results to the planter. Our list, showing varieties and prices has just been issued. Send for a copy at once. It will interest you.

We can also offer French Crab Apples, Kieffer Pear, Mahaleb Cherry and Quince Seeds and a complete list of Tree and Shrub Seeds. A limited supply of Apple, Pear, Cherry, Plum and Quince Seedlings remaining. Send for lists and prices.

THOMAS MEEHAN & SONS

Wholesale Nurserymen and Tree Seedsmen
DRESHER (near Philadelphia) PA.

BOBBINK & ATKINS

WORLD'S CHOICEST NURSERY PRODUCTS

- | | |
|--|--|
| ROSES, in all kinds and varieties | PALMS and BAY TREES by the thousands |
| EVERGREENS and CONIFERS, in several hundred kinds and varieties | Pot-grown FORCING PLANTS, Autumn Delivery |
| RHODODENDRONS, Hardy, ENGLISH HYBRIDS, Maximum and Catawbiense | FRUIT-TREES, home-grown, imported, DWARF and TRAINED |
| BOXWOOD, in all shapes, forms and sizes | SMALL FRUIT, in all kinds and varieties |
| HARDY AZALEAS, in all varieties and colors | [NUT TREES, profitable kinds |
| FLOWERING SHRUBS, in bush and standard forms in hundreds of kinds and varieties] | OLD-FASHIONED, Hardy FLOWERING PLANTS, in thousands of kinds and varieties |
| JAPANESE MAPLE, in all colors and varieties | PAEONIAS, IRIS, PHLOX FERNS, HARDY GRASS |
| SHADE TREES, in hundreds of useful and attractive varieties | KITCHEN HERBS and ROOTS |
| MAGNOLIAS and other FLOWERING TREES | RUTHERFORD PARK LAWN GRASS SEED |
| WEeping and STANDARD TREES, in many varieties | AUTUMN BULBS, Dutch, French and Japanese kinds |
| HEDGE PLANTS, in all popular kinds | Interior and Exterior [DECORATIVE PLANTS, in large variety |
| HARDY TRAILING VINES and CLIMBERS | VISITORS to our nurseries are always welcome |
| HARDY VINES and CLIMBERS in pots | ASK FOR WHOLESALE CATALOG |
| SPRING and SUMMER FLOWERING BULBS, ROOTS and PLANTS | |

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RUTHERFORD, N. J.

OUR SLOGAN :
Plant for Profit

Berberis Thunbergii Seedlings
Large Stock
Fine Grade
For Immediate Shipment

C. R. Burr & Company
Manchester, Conn.

IF YOU WANT a fine stock of Standard Apple, Pear, Cherry and Peaches, also Roses, write for our wholesale price list. We have an extra fine stock of

HYDRANGEAS
PANICULATA
GRANDIFLORA

John Charlton Nursery Company
Importers and Growers
ROCHESTER, N. Y.

FOREST TREES
FRUIT STOCKS

Shipments of over 160 Million of
Plants Annually.

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J. HEINS' SONS
HALSTENBEK, No. 152
Near Hamburg, Germany

♦ ♦

Please write for Catalogue and Forest
Planter's Guide to our American Agent:

OTTO HEINECKEN
287 Broadway
NEW YORK CITY

EVERGREEN
SEEDLINGS

FOR SPRING SHIPMENT we offer a large stock of all leading varieties, grown in soil to develop extra stocky, well rooted seedlings. Orders filled with plants dug fresh and shipped the same day. : : : : :
Spring price list now ready.

R. DOUGLAS' SONS
ESTABLISHED 1848

Waukegan Nurseries

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PYRAMID.

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., FEBRUARY, 1912

No. 2

FEDERAL LEGISLATION

Proposed Bill Providing for Inspection of Import Nursery Stock, Prepared by the United States Department of Agriculture and Submitted to Committee on Legislation

Horticultural Commission to be Composed of U. S. Dept. of Agriculture Officials

To regulate the importation and interstate transportation of nursery stock, to enable the Secretary of Agriculture to appoint a Federal Horticultural Commission and to define the powers of this commission in establishing and maintaining quarantine districts for plant diseases and insect pests, to permit and regulate the movement of fruits, plants, and vegetables therefrom, and for other purposes.

Sec. 1. BE IT ENACTED by the Senate and House of Representatives of the United States of America in Congress assembled, That a Federal Horticultural Commission shall be established with the powers and for the purposes hereinafter defined.

Sec. 2. That this Federal Horticultural Commission shall consist of five members, to be appointed by the Secretary of Agriculture from two or more bureaus and offices existing in the Department of Agriculture.

Sec. 3. That it shall be unlawful for any person, firm, or corporation to import or offer for entry into the United States from any foreign country any nursery stock unless and until a permit shall have been issued therefor by the Federal Horticultural Commission, under such conditions and regulations as the said Commission may prescribe, and unless such nursery stock shall be accompanied by a certificate of inspection in manner and form as required by the aforesaid commission from the proper official of the country from which the importation is made to the effect that the stock has been inspected and found free from injurious plant diseases and insect pests; *Provided*, That the Horticultural Commission shall issue the permit for any particular importation of nursery stock when the conditions and regulations as prescribed in this section shall have been complied with: *Provided further*, That nursery stock may be imported for experimental or scientific purposes, without the certificate of inspection or the permit of the Horticultural Commission hereinbefore required, upon such conditions and under such regulations as the said Com-

mission may prescribe: *And provided further*, That nursery stock imported from countries where no official system of inspection for such stock is maintained may be admitted upon such conditions and under such regulations as the Horticultural Commission may prescribe.

Sec. 4. That it shall be the duty of the Secretary of the Treasury promptly to notify the Federal Horticultural Commission of the arrival of any nursery stock at port of entry; that the person, firm, or corporation receiving such stock at port of entry shall, immediately upon entry and before such stock is delivered for shipment or removed from the port of entry, advise the Federal Horticultural Commission, or the proper State or Territorial Official, in the State or Territory or the district to which such nursery stock is destined, as the Federal Horticultural commission may elect of the name and address of the consignee, the nature and quantity of stock it is proposed to ship and the district and country where grown; that no person, firm, or corporation shall ship or offer for shipment to any common carrier, nor shall any common carrier transport or receive for transportation, any nursery stock imported into the United States from one State or Territory or the District of Columbia into another State or Territory or the District of Columbia without notifying the Federal Horticultural Commission, or the proper State or Territorial Official in the State or Territory to which such nursery stock is destined, immediately upon the delivery of the said stock for shipment and before transportation is begun, of the name and address of the consignee, of the nature and quantity of stock it is proposed to ship, and the country or district where the same was grown.

Sec. 5. That no person, firm, or corporation shall import or offer for entry into the United States or any of its possessions any nursery stock unless the case, box, package, crate, bale, or bundle thereof shall be plainly and correctly marked to show the general nature and

quantity of the contents, the country and district where the same was grown, the name and address of the shipper, owner, or person shipping or forwarding the same, and the name and address of the consignee.

Sec. 6. That no person, firm, or corporation shall ship or deliver for shipment to any common carrier, nor shall any common carrier accept for transportation or transport from one State or Territory or the District of Columbia into another State or Territory or the District of Columbia, any such imported nursery stock, the case, box, package, crate, bale, or bundle whereof is not plainly marked so as to show the nature and quantity of the contents, the name and address of the consignee, and the country or district where such stock was grown.

Sec. 7. That the Federal Horticultural Commission be, and is hereby, authorized to make such rules and regulations as may be necessary for carrying out the purposes of this Act.

Sec. 8. That whenever, in order to prevent the introduction from any foreign country into the United States or any of its possessions of any tree, plant or fruit disease, or of any injurious insect, new or not theretofore widely prevalent or distributed within and throughout the United States, the Horticultural Commission shall determine that it is necessary to forbid the importation into the United States or any of its possessions of nursery stock or of any class of fruits, vegetables, bulbs, plants, and seeds from a country where such disease or insect infestation exists, it shall promulgate such determination, specifying the country and district and the class of nursery stock or the class of fruits, vegetables, bulbs, plants, or seeds, which, in the opinion of the Commission should be excluded, and, following the promulgation of such determination by the said Commission and until the withdrawal of the said promulgation by it, the importation of the class of nursery stock or of the class of fruits, vegetables, bulbs, plants, or seeds specified in the said promulgation, from the country and district therein named, regardless of the use for which the same is intended, is hereby prohibited, and until the withdrawal of the said promulgation by the said Commission, and notwithstanding that such nursery stock, fruits, vegetables, bulbs, plants, or seeds be accompanied by a certificate of inspection from the country of importation, no person, firm, or corporation shall import or offer for entry into the United States from any foreign country specified in such promulgation any of the class of nursery stock or of the class of fruits, vegetables, bulbs, plants, or seeds named therein, regardless of the use for which the same is intended. *Provided*, That before the Federal Horticultural Commission shall promulgate its determination that it is necessary to forbid the importation into the United States of the articles named in this section, it shall on request of interested parties give a public hearing under such rules and regulations as the said commission shall prescribe on the question, at which hearing any party in interest may appear and be heard, either in person or by attorney.

Sec. 9. That the Federal Horticultural Commission is authorized and directed to quarantine any State or Territory or the District of Columbia, or any portion thereof, when it

shall determine the fact that a dangerous plant disease or insect infestation, new to or not theretofore widely prevalent or distributed within and throughout the United States exists, in such State or Territory, or the District of Columbia; and the said Commission is directed to give notice of the establishment of such quarantine to common carriers doing business in or through such quarantined area, and shall publish in such newspapers in the quarantined area as it shall select notice of the establishment of quarantine; that no person, firm, or corporation shall ship or offer for shipment to any common carrier, nor shall any common carrier receive for transportation or transport, nor shall any person, firm, or corporation carry or transport from any quarantined State or Territory or the District of Columbia, or from the quarantined portion thereof, into or through any other State or Territory or the District of Columbia, any nursery stock or any fruits, vegetables, bulbs, plants or seeds, except as hereinafter provided; that it shall be unlawful to move, or allow to be moved, any nursery stock, or any fruits, vegetables, bulbs, plants, or seeds specified in the notice of quarantine hereinbefore provided, and regardless of the use for which the same is intended, from any quarantined State or Territory or the District of Columbia, or quarantined portion thereof, into or through any other State or Territory or the District of Columbia, in manner or method or under conditions other than those prescribed by the Federal Horticultural Commission; that it shall be the duty of the Horticultural Commission to make and promulgate rules and regulations which shall permit and govern the inspection, disinfection, certification, and method and manner of delivery and shipment of nursery stock, or any fruits, vegetables, bulbs, plants, or seeds specified in the notice of quarantine hereinbefore provided, and regardless of the use for which the same is intended, from a quarantined State or Territory or the District of Columbia, or quarantined portion thereof, into or through any other State or Territory or the District of Columbia; and the said Commission shall give notice of such rules and regulations as hereinbefore provided in this section for the notice of the establishment of quarantine. *Provided*, That before the Federal Horticultural Commission shall promulgate its determination that it is necessary to quarantine any State, Territory, district or portion thereof, under the authority given in this section, it shall on request of interested parties give a public hearing on the question, at which hearing any interested party may appear and be heard, either in person or by an attorney.

Sec. 10. That whenever in this Act the term "nursery stock" is used it shall be construed as including field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit-pits, seeds of fruit or ornamental trees or shrubs or other plants or plant products for propagation, except vegetable and flower seeds, bedding plants, and other soft-wooded herbaceous plants, bulbs, and roots: *Provided*, That whenever the Federal Horticultural Commission shall determine that the unrestricted importation of any fruits, vegetables, roots, bulbs, seeds, plants, or other plant products not included by the term "nursery stock" as herein defined may result in the entry

into the United States of injurious plant diseases or insect pests, the said commission shall promulgate its decision, and thereafter, and until such promulgation is withdrawn, such plants and plant products imported or offered for import into the United States, or any of its possessions, shall be subject to all the provisions of this Act.

Sec. 11. That the term "Territory," as used in this Act, shall include the insular possessions of the United States and the Canal Zone.

Sec. 12. That any person, firm, or corporation who shall violate any of the provisions of this Act, or who shall forge, counterfeit, alter, deface, or destroy any certificate provided for in this Act or in the regulations of the Federal Horticultural Commission, shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished by a fine not exceeding five hundred dollars, or by imprisonment not exceeding one year, or both such fine and imprisonment, in the discretion of the court, and it shall be the duty of the United States attorneys diligently to prosecute any violations of this Act which are brought to their attention by the Federal Horticultural Commission or which come to their notice by other means.

Sec. 13. That there is hereby appropriated, out of the moneys in the Treasury not otherwise appropriated, to be expended as the Federal Horticultural Commission may direct, for the purposes and objects of this Act, the sum of fifty thousand dollars, which appropriation shall become available on ———, nineteen hundred and ———.

Sec. 14. That this Act shall become and be effective from and after the first day of July, nineteen hundred and twelve.

[The above is subject to change and modification according to mutual agreement between the Legislative Committee and United States Department of Agriculture. See comments, page 55. Ed.]

Legislation

PETER YOUNGERS ACTIVE

Peter Youngers of Nebraska has, in the language of the day, not been allowing the grass to grow under his feet in connection with the testing of the laws of Montana and Wyoming affecting nurserymen. He has taken this up with the attorney-generals of the states in question, and has received as an opinion the information that it will not be necessary to pay a license fee in the state; for such would interfere with inter-state commerce. The condition may be changed where the business is done through a representative; for such representatives would probably be subject to the regular internal taxes of the state. Mr. Youngers has also been occupied with the task of endeavoring to unify some of the irregularities of the laws of these western states. May his efforts be attended with a large measure of success. The following is his advice to nurserymen:

DO NOT PAY LICENSE IN MONTANA

Geneva, Neb., Jan. 12, 1912.

Should any attempt be made to collect a license in Montana, wire W. M. Johnson, Atty., Billings, Mont., and

also notify me and we will take the matter up at once. Mr. Johnson will now turn his attention to the Wyoming law, and we hope to get good results from that state. If any demand is made in Wyoming for license advice me at once and if any nurseryman has paid license lately advise me promptly and give date so that we can get action promptly.

Respectfully yours,

PETER YOUNGERS,
Chairman.

Mr. Youngers' advice is based upon the following:

Helena, January 3, 1912.

Hon. Chas. A. Taylor,
County Attorney,
Billings, Mont.

Dear Sir:

I acknowledge receipt of your letter of the 28th ult., relating to case proposed to be instituted by Mr. Johnson of that city to test the constitutionality of the law requiring persons, firms, or corporations engaged in the business of selling nursery stock in this State to procure a license.

When Mr. Johnson was in the city a few days ago this question was discussed and it was then thought advisable to have such action instituted in case the State Board of Horticulture demanded the payment of this license of nurseries situated without the State. You are aware of the doubt existing relative to the constitutionality of this part of the statute. However, since the interview had with Mr. Johnson, Mr. M. L. Dean, State Horticulturist, has called at the office and after discussion of the law he reached the conclusion that he would not any longer make demand for the payment of this license by non-resident nurseries. In view of this fact I can see no reason now existing for the institution of any action whatsoever, for if no attempt is made to enforce the provisions of this law relating to foreign nurseries, then such nurseries are not injured by reason of the mere fact that the law still remains upon the statutes.

I would, therefore, respectfully suggest that no action be brought unless the State Horticultural authorities do make some attempt to enforce this law. Of course, you understand this applies only to the license feature of the law and has no bearing whatsoever upon the inspection of stock shipped into the State or of the fees, if any, required for that purpose.

Yours very truly,

ALBERT J. GALEN,
Attorney General.

Quiz Column

HANDLING STORED STOCK

Messrs. Thomas Meehan & Sons,
Dresher, Pa.

Dear Sirs:

Having read an article by you in the NATIONAL NURSERYMAN we would like to impose upon you for a little information as to the care of a storage cellar.

We built a storage building in the season of 1910; this building is built practically all above ground and is 60 by 72 feet, built of hollow building tile, 1 course 4 x 4 1 compartment and 1 course 4 x 8 2 compartment tiles with 2 in. air space between the courses making a 14 inch wall.

We have openings 10 inches square in the walls near the ground which we can open to let in air, these openings being spaced about 10 feet apart, in the walls of the airway above

we have 5 doors on each side for letting out the air and to create a draft.

Last season we were troubled to a great extent with mould and we are at a loss to know what the trouble is.

You mention in your article having air shafts in the roof; would you please give us an idea of the construction of these and how they are cared for, are they always open for ventilation or only part of the time, also if you use any other openings for ventilation?

In packing stock with excelsior or shingletow how wet do you make this packing, and do you add any moisture at any time after packing the stock?

Is there any disinfectant or smudge that could be used to kill this mould when it gets into a cellar?

Thanking you in advance for any information that you would care to give us we are,

CEDAR RAPIDS NURSERY CO.,
By H. G. WILLIAMS.

ANSWER BY THOS. B. MEEHAN

I am not able to advise you on the points outlined in your letter for the reason that it is evident that you use the common method of packing away your stuff, that is, to rick it up, stuff a little shingle toe or moss among the roots and depend upon the confinement of the moisture to prevent evaporation. By such method you are very likely to get mildew and mould in your store-house. I believe under such conditions, it is customary to "smudge" by burning damp hay or straw inside of the building.

Our method of storage is so different and so out of date as viewed by most nurserymen, that we hesitate to explain it, though we are free to say that we would not use any other, as we believe that our stock carries better throughout the winter, that there is no danger of fungus or mould and that better results are achieved when the stock is planted out than with stock cellared under any other method.

The interior of our cellar is a mass of stationary bins. Our plants are tied five in a bundle and the bundles placed flat in layers in the bins with roots at either side of the bin and tops overlapping to some extent. As every layer goes in, the roots are covered with damp sand, then another layer of plants, then another covering of sand. The boards in the front of the bins are movable and these boards are built up as the bin is filled. When the bin is completed, an extra thick layer of sand is placed over the roots.

By this method, we can let the temperature in our store-house go below the freezing point, though we like to keep it say about thirty, and in fact, it rarely goes below that, but in order to keep it at thirty, we have air shafts in the roof, so that there is a continuous current of fresh air throughout the building. These air shafts are open all the time and simply consist of four boards nailed together with a board over the top as a stopper and large holes bored in the four sides of the air shaft above the roof for ventilation. We have no air ventilators along the base of the building.

The sand which we use to pack around the roots of the plants is what we know here as bank sand, that is, it is taken right out of the ground and we use it just in the condition it comes out of the ground when we are ready to pack our

plants away. Sometimes, it is quite wet, and other times, not so much so, all depending on the weather we have at the time we dig the sand.

When we have emptied our store house in the early summer, we haul the sand out to a field adjoining the packing house, spread it out in a layer about 18 inches deep, let it lie there all summer and until we are ready to use it again in the fall, by which time, it is perfectly pure and fit to use a second time.

fruit and Plant Notes

CRAB SEEDLINGS AS STOCKS

For cultivation in Ontario and Quebec, Mr. W. T. Macoun of the Experimental Farm at Ottawa recommends the sowing of the seed of Martha, Whitney, and Hyslop crabs, for the purpose of securing stocks. This seed is sown in the fall, germinates promptly in the spring, and the seedlings remain in the beds over the first winter. The following spring they are set out in nursery at regular nursery row distances. The trees are taken up at the close of the second season's growth, and are root grafted during the winter. Using stocks of this size, the writer claims to be able to secure salable trees at the end of the first year. He also claims that this class of seed gives him stocks quite uniform in character.

CITRUS CROP FOR 1912 EXPECTED TO BREAK ALL RECORDS

Preliminary estimates of the California Fruit Growers' Exchange set the crop of California citrus fruits for the coming year at 49,200 carloads. The record of the past season was 43,585 carloads.

California Washingtons arrived in New York early in December, and were sold at from \$2.40 to \$4.00 per box.

[The frosts of December have materially changed the situation since the above was written.]

MR. BURBANK'S TWENTIETH CENTURY FRUITS

The cover informs the public that "never in the history of mankind has there been offered a list of such valuable new fruits as those herein described," and the reader is also informed in the body of the publication that "the trees offered in this list are absolutely new creations, none like them existing on this earth. (This presupposes a wide range of knowledge.) All are early bearers, in fact hundreds of the very trees offered you this season, though generally only one year old, have borne delicious fruit freely during the past summer all along the nursery row." This sounds not only remarkable, but miraculous! That trees should produce fruit the first season of their growth in the nursery row is upsetting our preconceived ideas of the behavior of horticultural products of this kind. Mr. Burbank is certainly a man of courage and apparently fully willing to back his convictions; for he says that during the period of nearly forty years when he has been in business, he has sent out millions of trees "everywhere on earth where the sun shines and trees can be grown," and he has "yet to have a customer

complain that the variety was not as represented." This is indeed a record to be proud of. We cannot refrain from remarking, however, that it was our recollection that we did hear murmurs to the effect that the "wonderberry" was merely black nightshade, and that the spineless cactus was not a Burbank creation at all.

Among the new fruits listed are the Standard Prune, a free-stone, the Burbank cherry, a number of new hybrid plums, among which is one christened "Gee Whiz," which no doubt is of startling characteristics, and a number of crosses between the apricot and the plum. These are Mr. Burbank's plumcots introduced some years ago. In addition, there are a number of introductions from various parts of the country, among which we notice the Canadian barberry, which raises the question as to what it is and how it differs from other barberries. The catalogue suggests the work of an exceedingly industrious horticulturist, and is presented in very attractive form to the interested public.

HARDY SALVIA

Baker Bros. Co., of Fort Worth, Texas, send a specimen of hardy salvia of the perennial type.

Comment: We were very much interested in examining the specimen of hardy salvia which you forwarded under date of Oct. 27. The plant certainly bears an attractive appearance. We have spent some time in attempting to identify it, and to the best of our ability it would seem to be *Salvia Greggii*. This plant is a native of Texas and Mexico. It grows about three feet high, and is distinguished from the common red flowered kinds by the fact that only the lower part of the lip of the corolla is strikingly showy. In the specimens received, this was bright red to carmine, and the remainder of the corolla dull purplish color. This plant is recorded as being nearly hardy at Washington, D. C., by the late noted horticulturist, John Saul of that city. It would seem to be a shrub entirely worthy of cultivation for the Gulf region, and as far north as Virginia, at any rate.—EDITOR.

SEEDLING BLACK WALNUT

In today's mail I am sending you a few average samples of Black Walnuts produced on a tree owned by a friend of mine in this county. This nut so far surpasses in size the common Walnut grown in this section, where the Walnut is a native tree, that as a specialist in hardy trees, I wanted you to see the nut and advise me what you think of it. Is there to your knowledge any variety of Black Walnut known and propagated that equals this nut in size and quality?

If this nut appears worthy of dissemination, would you be kind enough to explain to us the best method of propagation? If budded or root grafted, what time of the year would be the best to do the work?

We shall value an expression from you most highly, and appreciate greatly your advice regarding the propagation of the trees, should it seem desirable to introduce them to the trade.

Thanking you in advance for your consideration of the matter, and a reply at your earliest convenience, I am

PRUDENTIAL NURSERY CO.,

Mich.

Comment: This nut is peculiar in size and shape. It is not a typical black walnut in form, and it would appear to us that there is a strong probability of its being a cross between a butternut and a black walnut. This surmise is further strengthened by the flavor of the nut. The flavor suggests the butternut. The flavor is excellent, but the principal objection to the nut is the thickness of the shell and the lack of good cracking quality. It is defective from the commercial standpoint in both of these particulars.

We would think it highly desirable to plant some of these nuts with a view of raising seedlings. Should you wish to propagate it, the best method to employ would be to use the black walnut seedlings and crown-graft there in the ground. The cions should be inserted in the root at that point where it is markedly swollen. This would be two or three inches below the surface of the ground. The grafting should be done in early spring before signs of growth are apparent.—EDITOR.

Obituary

VICTOR LEMOINE

The name of Lemoine is a familiar one to nurserymen of this country who are in any wise associated with the handling of ornamental and herbaceous stock. Victor Lemoine lived his long life at Nancy, France, where he labored indefatigably as an improver of plants. As a hybridizer, he has done remarkable work in the gladiolus group, in syringas, lilacs, spiraeas, and many other plants. He came from a race of gardeners, and his love for horticulture was innate and hereditary. He was a modest worker, and introduced his new developments without flourish of trumpet or claims which the behavior of the plant might or might not uphold. Not only in France, but in Europe generally, as well as in England and America, his fame as an originator and discriminating plantsman was thoroughly established. He died at his home on December twelve, 1911. When the life record of Victor Lemoine is completely recorded, he will stand as one of the great originating horticulturists of the century.

Our Exchanges

The annual review number of our worthy contemporary, the *California Fruit Grower*, for December 30, 1911, is a sumptuous edition in red and white covers. A main feature of the issue is a statistical review of the output of California's orchards and fruit factories. The number also reviews the deciduous fruit season of 1911 in California, contains an important article on the history of the vine and its development in California by George C. Husmann, a sketch of the olive industry, general review of the canned goods trade, together with various papers on miscellaneous horticultural topics. Altogether the issue reflects credit on the editors, and will be received with great satisfaction by the speakers.

PINEAPPLE CULTURE IN FLORIDA

A SPECIALIZED INDUSTRY

By B. K. McCARTY

The successful and profitable production of pineapple fruit depends mainly on three things: first, the proper sort of land; second, high grade fertilizer applied at the right time; and third, careful, systematic, and intelligent cultivation. Florida, fortunately, has varied types of soils, and there are belts in her borders which are famed for their particular products. Hastings is famed for the potato, Sanford for the celery, and Fort Pierce for the luscious pineapple.

The pineapple requires either what is known as high hammock or pine land. A wet, low place will not give satisfactory results, as the pineapple requires a high, dry soil. Our East Coast land, when used for pineapples, is first cleared of all growth and underbrush, which is burned; and the land is then "grubbed," i.e., completely pulverized and stirred by means of a grub hoe, shaped somewhat like a mallox, but wider. Grubbing should be done with care, as too many roots left in the ground prevent the plant from starting properly, and make the cultivation harder and more expensive. The land is carefully and systematically raked of all trash roots and other rubbish. This material is burned in windrows in the trails. The land should not all be burned over, as this destroys humus which has taken nature centuries to produce, and which, if left on the ground, prolongs the life of the field. A pineapple field is laid off in beds of twenty rows each, planted in the row twenty inches square with a six foot trail between the beds. This gives twelve thousand five hundred plants to the acre. Some people plant in narrow beds, but, personally, I prefer the wide beds. The land is marked off with a marker pulled by man power. When you have your land prepared, the next move is to plant your slips. A pineapple plant or slip is first shucked, or the hard base or tip is cut off with a sharp knife, and the lower leaves are removed, which will show the small rootlets all on the under side. The plant should not be peeled so high that white shows, because in that case the plant will scald in the soil. Planting is done by means of a trowel, and care must be taken not to set the slip so deep that sand will fill the bud or heart of the plant. Plants should be set as soon as they can be obtained in the summer from July 15th to August 30th. Slips set later are in danger of rotting. About ten days after setting, or as soon as they are firmly rooted, I cultivate them to remove the sand which may have gathered around the base of the plant; and until the plant gets too large, I do this at least once a month, if ground is dry enough, as this cultivation will greatly aid in growing the plant. From the time of planting until the first crop is harvested is about twenty-two months.

The original plant suckers form the bole of the plant, and this continues from crop to crop. The life of a field should

be about ten crops with proper care, and sometimes the life of the field may be lengthened by extra good care. I use from 3000 to 4000 pounds per year per acre of high grade fertilizer. This, for the first year, is mostly worked into the ground: after that it is broadcast over the plants, and the rain washes the fertilizer down to the base of the plant. Pineapple plants require lots of ammonia. The current opinion among the pineapple growers is that too much potash has been used in the past. A volume could be written on the matter of fertilizer, and this should be worked out most carefully for each particular piece of ground and each season. The pineapple season in Florida varies in different years, but usually commences about May 20th and continues for about forty days.

Pines are picked in the field by men who wear canvas leggings and mittens to protect them from thorns, and the apple is thrown to a catcher in the trail, who wheels the fruit out to where it can be picked up by the wagon. Great care should be used in picking. The fruit will show a light greenish cast around the base when it is ready for shipment, and if it is picked too green, the result is a poorly flavored fruit. Pines should be cut with a knife inserted under the base of the apple, severing the stem. This prevents the fruit from rotting around the core. Pineapples are easily bruised, so unusual care should be taken in handling. The packer must always remember that when the fruit first strikes, it has no elastic skin to protect it, but, instead, is solid meat. The hauling from the field is done in field boxes which are made with orange heads and centers and pineapple slat sides. This gives room for three full layers of fruit of any size without bruising when crates are stacked together. Upon arrival at the packing house, the apple should be carefully laid down upon a padded bin to prevent bruising.

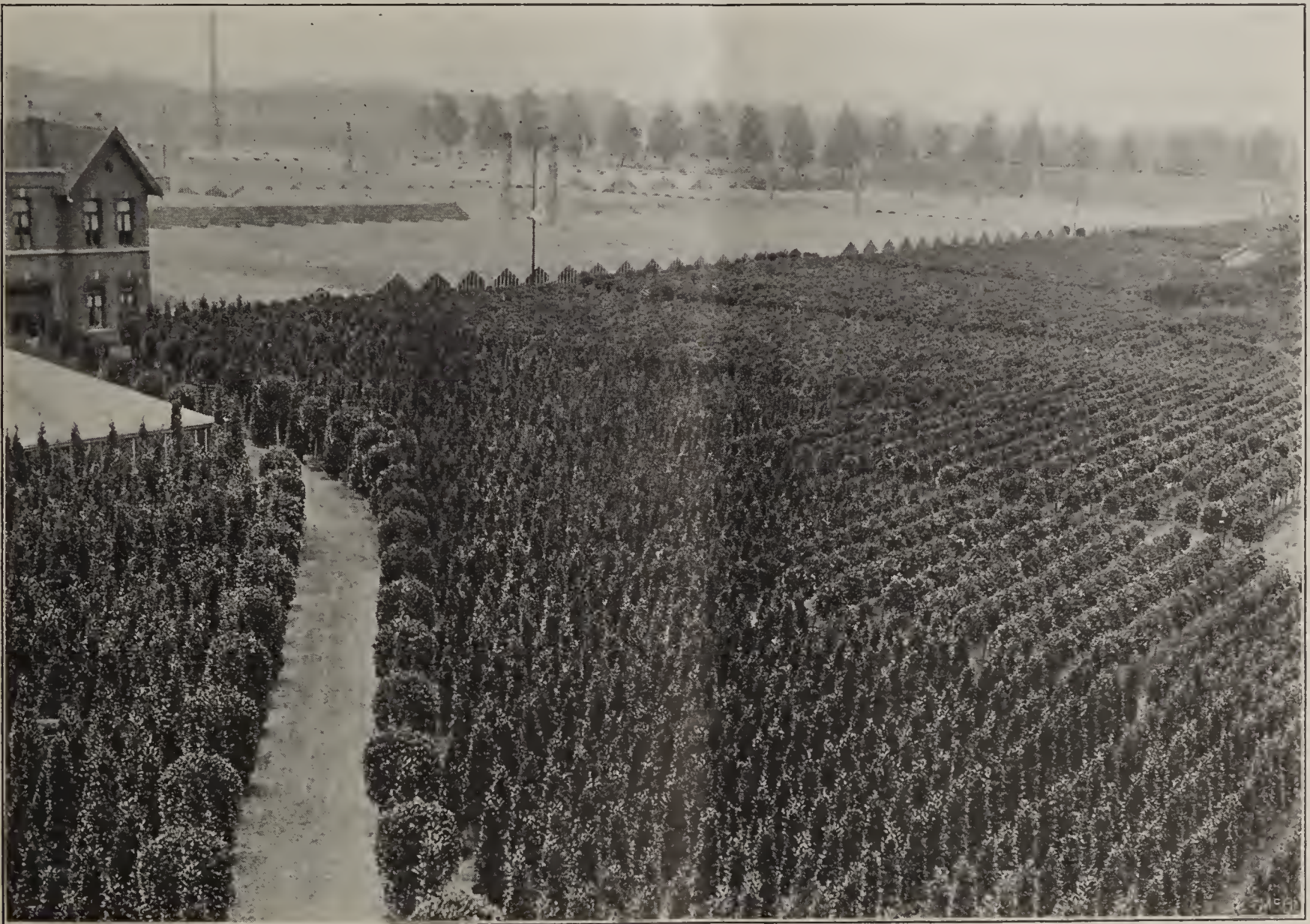
The ordinary packer packs one hundred crates of pines a day of all sizes, running from eighteen to forty-eight in the crate, packed in layers, alternating crowns and apples. The fruit is wrapped in paper fifteen by twenty inches, and the crate is ten and one-half by eleven and one-half by thirty-six inches. Packages should be neat and attractive. The fruit should be carefully wrapped and packed and graded as carefully as possible, for the package reflects upon its grower and packer. Try in all possible ways to establish your mark upon the market as being absolutely reliable, so when a person purchases a box of your fruit he will find that, as far as in your power, you have fulfilled your part, both in pack and flavor. Don't hesitate to throw out even the slightest marred or defective fruit, for by so doing you are protecting your name and brand, whose value is priceless. Pineapples are loaded in cars and then slated in tiers, three hundred crates to the car, while some markets accept a

minimum car of two hundred and fifty crates. Some growers sell f. o. b. at their packing houses. Others ship to commission houses, while still others use the distributors to advantage. The growing of pineapples has always been a lucrative business in the past. While we have to meet Cuban competition in its severest form without relief to any extent from our own government in the way of duty, still the pineapple grower in his own small way has tried to "make good," and with but few exceptions has succeeded. Our business, I regret to say, has some who are careless in the picking of green fruit, which has a demoralizing effect upon the market, though this is not practised by any means to the extent it is done in the orange industry. I am satis-

here. Many nursery and florist firms buy them in carloads.

For summer decorations, landscape work, roof gardens and formal gardens, nothing is more suitable than standard bays. Their close clipped circular heads impart an aristocratic tone to otherwise dull surroundings. Many nursery firms stand a few pairs around their offices and make of them not only a decoration, but a very practical advertisement, for these trees sell others.

Price should not be a drawback to the increased use of these trees. A standard with a crown 30 inches in diameter costs only \$5.00 per pair in Belgium, or approximately \$8.50 per pair F. O. B. New York on an import basis. How a Belgium firm can grow a tree ten years, hand trim it several



A MAGNIFICENT BLOCK OF BAY TREES

fied in my own mind that The Florida Citrus Exchange will eventually and entirely correct this unnecessary evil, while we hope for that same happy time in our own business. We have this protest to make to the fancy fruit dealer who sells our fruit to the man who eats it—that he fails to show the same up in its best form, allowing half rotten and withered fruit to clog up his stand, and thus give to the purchaser a poor opinion of our fruit.

BAY TREES

During the past few years importations of Bay Trees (*Laurus nobilis*) have been increasing at a fast rate. They arrive in the Eastern states from Belgium in April-May and in Pacific Coast and Southern states in September-October. As they come in tubs they are ready for display upon arrival

times each summer, store it in glass-roofed, steam-heated sheds every winter, re-tub it many times, is a great question, when the price of wood and coal is considered, yet every little firm grows them, some of the larger firms carry ten to fifteen thousand of them in stock and export them to all civilized countries.

McHutchison & Co., the import house of New York, recently issued a very attractive booklet, "Just Bays," picturing all shapes in all sizes, which they will send on request to any firm in the trade writing on their business stationery.

Enclosed find \$1.00 to push my subscription ahead another year. Your paper is the BEST EVER and cannot get along without it.

Minn.

DODGE CO. NURSERY,

W. E. FRYER.

SOME FACTS CONCERNING THE PROPAGATION OF PECAN TREES FOR PLANTING IN THE NORTH

By W. N. ROPER, Petersburg, Va.

FROM REPORT OF NORTHERN NUT GROWERS ASSOCIATION

Pecan trees for successful culture in the North must be of hardy, early-maturing varieties, budded on stocks from northern pecans and grown in nursery under suitable climatic conditions. These are requisites indicated by practical, experimental work and observations extending over several years.

The successful production of large southern pecans in far northern climates can hardly be looked for except under the most favorable conditions of soil, location, and season. There seems no good reason for planting southern pecans in the far North, except in an experimental way; for there are northern varieties now being propagated that are the equal of most of the standard southern sorts in quality and very little below them in size. They will prove to be as large or larger in the North than the southern varieties grown in the same locality, and much more apt to bear regularly.

The method used in propagating the hardy types is important. Budding and root-grafting each has its advocates among pecan growers in the South, and this would indicate that there is no great difference between the trees propagated by these two methods when they are planted in that section. But based on results with several hundred specimens, root-grafted pecan trees are not desirable for planting in northern climates.

EXPERIENCE IN VIRGINIA

During the past six years there have been grown in a nursery in the eastern part of Virginia, near Petersburg, about 2,000 root-grafted trees of eight southern varieties of pecans and one Virginia variety, including Stuart, Van Deman, Moneymaker, and Mantura. All these trees are worthless. None of them, though they have been cared for, has ever been considered by the grower fit to dig and transplant. Most of these trees suffer winter injury each year, many of them being killed back to the graft union. Those that do not die below the ground grow out the following summer, only to be killed back again the next winter or spring. Those damaged only a part of the way down the trunks, even when not badly injured, do not recover promptly. Several hundred budded trees grown during the same period in adjoining rows have been entirely free from winter injury. The grafts and buds were inserted on stocks from northern and southern nuts.

A thousand budded and root-grafted trees received from six southern nurserymen were planted in orchards in the same locality. A very large percentage of the root-grafted trees died; only a small percentage of the budded trees died. Many of the root-grafted trees that survived are making poor growth; most of the budded trees are strong and

vigorous. The only trees of the Virginia varieties ever reported winter-killed were root-grafts.

SOUTHERN STOCKS UNSUITED TO THE NORTH

No root-grafts of the northern types on northern stocks have been made in Virginia, but root-grafts of Indiana varieties on southern stocks transplanted there winter-kill badly. Several Indiana trees root-grafted on southern stocks and in their second years' growth in the nursery winter-killed in Florida last season. Not a single budded Indiana tree in Virginia suffered any winter injury whatever, although the buds were grown on southern as well as on northern stocks. All the root-grafted Indiana trees transplanted at Petersburg during the past two years have died from winter injury.

Northern types root-grafted on northern stocks not having been tested, no definite information can be given, of course; but with all southern varieties winter-killing in the North, when root-grafted on either northern or southern stocks, and the Virginia variety winter-killing when root-grafted on southern or northern stocks, and the Indiana varieties winter-killing both in the North and in the South when root-grafted on southern stocks, it seems reasonable to presume that the northern varieties root-grafted on northern stocks will also winter-kill. The stocks of the root-grafted trees are seldom injured. They send up sprouts except in cases where the graft union is so far beneath the surface of the soil that after the grafted part is killed the stock is too deep to grow out.

Not a single tree out of a total of 40,000 seedlings in Virginia grown from northern nuts planted during a period of six years has ever been found affected by winter injury; practically all the trees out of 50,000 or more grown in the same locality from southern nuts planted during the same years had their tops affected by winter injury the first, and most of them the second season of their growth; but no injury after the second season has been noted.

With the view of making southern varieties better adapted to planting in northern area, experiments have been made in propagating them on stocks from northern nuts. This stock has thus far proved unsatisfactory for southern varieties either budded or root-grafted. The trees from northern nuts go dormant earlier in the fall and remain dormant later in the spring than trees from southern nuts. Northern trees in the nursery rows in early spring, in a perfectly dormant condition, are in striking contrast with the southern trees and their fresh, green foliage. Though the growing period in the North is nearly a fourth shorter for the northern than for the southern varieties, the native trees in the North make equal growth with the Southern

trees there during the same season. Northern varieties budded on northern stocks grown at Petersburg the past summer made nearly as much growth during one season as root-grafted trees of the same varieties on southern stocks grown in Florida two seasons. The trees at Petersburg were from dormant buds set the previous fall. They were just starting into growth in May when the trees in Florida had made a growth of six to twelve inches.

NATURAL ADAPTATION

The northern seedlings in the North make better growth in a season than the northern seedlings in the South, as far as has been observed. When the growing period begins in the northern climate, the native trees respond at once to the quick growing season and out-grow the trees that have been accustomed to a slower growing climate. When their growing period is over, they begin promptly their preparation for the winter. The long, slow growing climate of the South does not seem to give the quick growing tree of the North an opportunity for its greatest growth at the important period. There appears to be too much difference between the growing habits of the Southern and the Northern pecans for either to be suitable stock upon which to grow the other.

Two choice trees of Moneymaker and one of Stuart, all well grown and giving every promise of success, were selected out of a large number of these varieties budded on northern stocks, and were transplanted in orchard two years ago for experiment. The Moneymaker trees have made little growth and the Stuart tree practically none. All have an unhealthy appearance and are left standing only for further experiments.

The section of Virginia in which these experiments have been made affords very severe climatic tests. The temperature in winter sometimes goes below zero, the temperature in spring is variable, changing suddenly from warm to freezing. Pecan trees seem able to endure almost any degree of cold when they are in a thoroughly dormant condition. The winter-killing from which they often suffer in the South, as well as in the North, is due to the effect of sudden freezing temperatures following warm periods in winter or spring.

PLANT THE BEST ONLY

Only well grown, vigorous pecan trees should be planted in the North. It is a waste of time and money to plant indifferent pecan trees in any locality, and especially in a locality where they have to contend with severe climatic conditions. The size of the tree is less important than its root system and vigor. The purchasers of trees grown on thin, sandy soil, with the root systems consisting almost entirely of straight tap roots, destitute of laterals, need not expect success. Most of these trees will die early, and many of those that live will linger on for several seasons without making much growth, tiring out the patience of the planter.

The work of transplanting should be very carefully done and the trees given proper care and culture.

It has been found that it costs more to grow pecan nursery trees in the North than in the South, but it is believed that

planters in the North will find that these trees have a value which will far offset their additional cost.

Some of the methods of propagation and care are slightly different in the North from those that usually obtain in the South. But it is not practicable to go into the details connected with this work. The facts that have been mentioned are those that are believed to be of most importance for consideration by persons planting pecan trees in the North. Those who have gone thus far with the work upon which the conclusions are based are continuing as earnestly as they began.

The outlook for the success of the pecan industry in northern territory is exceedingly promising where hardy, early-maturing varieties are properly grown in nursery on hardy stocks under climatic conditions that will best fit them for the locality in which they are to be planted.

Note and Comment

THE REPLACING NUISANCE

Good work has been done in the way of arousing public sentiment against the practice of replacing by Mr. Robert Mayhew of Texas. At the recent meeting of the Western Nurserymen's Association in Kansas City, he placed the matter very strongly before the convention and brought conviction to the minds of many. There is no doubt of the soundness of his reasoning and of the absurdity of the common practice of replacing nursery stock. There are two parties to the responsibility of securing a good stand of nursery stock, and the planter carries much greater responsibility than the shipper. The principle ought to be to ship good stock, charge good prices, and place the planter on his own footing in regard to securing a stand from the trees set out. If he has a notion that they will be replaced free of cost, many careless men will take but slight pains in handling their stock. The whole principle is wrong, and the nurserymen should set their faces against it.

TRADE IN ORNAMENTALS

Only a few years ago the bulk of the trade in ornamentals was confined to the East. A very interesting evolution in this line of nursery work has been going on. As farmers in the Middle West and the newer portions of the intermountain and Pacific regions have become settled, have acquired comfortable homes and sufficient revenues, their thoughts have turned to the decoration and improvement of these homes. This has created a demand for ornamentals, but it is only fair in this connection to say that the nurseryman himself has been in many instances a prime factor in stimulating the demand. He has shown desirability from every standpoint of improving the home grounds, he has furnished the stock, and in many cases plans for the planting. Most nurserymen of the West find the ornamental to be growing with increased rapidity, and this is as it should be.

DEMONSTRATION ORCHARDS FOR ONTARIO

A movement is on foot in the Province of Ontario for the establishment of demonstration orchards in the principal

fruit districts of the Province. The establishment of fruit packing schools of a movable character is also being advocated. This is undoubtedly a good work, and greatly to be commended. It is to be remembered, however, that Ontario has already district experiment stations which, while not answering the commercial questions, do answer questions bearing upon adaptation and variety values.

SPRAYING LAWS

Kansas rejoices in an obligatory spraying law. Every orchardist as well as nurseryman is obliged to spray his fruit trees. In case the fruit grower or nurseryman neglects to do this, he is advised by the state authorities that such is necessary. If he persists in the neglect, the state authorities are authorized to come in and spray the trees and charge the cost as a tax on the land itself. The law has been tested, but each time it has been upheld. At the present time it looks as though there was no obstacle to prevent the growth of clean, healthy orchards in Kansas, and the man who does not care for the trouble of spraying should not plant an orchard.

Business Movements

Bound Brook Nurseries is the new name for Wadley Nurseries.

The new name and different officers are the only changes made, the corporation otherwise remaining the same.

Please erase the Wadley Nurseries from your lists, and substitute the Bound Brook Nurseries.

Bound Brook, N. J. BOUND BROOK NURSERIES.
January 16, 1912.

FRESNO NURSERY CO.

The Fresno Nursery Company of Fresno, California, is enlarging its business. An additional member has been taken into the Company. This is Mr. Charles B. Harkness. This gentleman, with Mr. F. H. Wilson and Charles A. Chambers, will inaugurate a vigorous campaign, and expect to very materially enlarge the business of the Company in the near future.

AMERICAN ASSOCIATION FOR HIGHWAY IMPROVEMENT

Probably never before in its history has the good road movement in the United States received such an impetus from an official source as in the proclamation which has just been issued by Governor William Hodges Mann of Virginia. The state paper written by Governor Mann called upon all the citizens of Virginia to set aside the week beginning November 13, 1911, as "Good Roads Week" and asked them to devote their united efforts "to the accomplishment of some practical result within the zone of their influence."

Governors of all the other states in the Union were requested to issue similar proclamations so that the entire country may be alive with the activity of farmers actually engaged in the improvement of the public highways during that week. It was intended to make the week the most notable in the history of the road movement in America. At the present time over \$1,000,000 a day is being spent on the improvement and maintenance of roads in the United States. In the week beginning November 11, it was expected that \$10,000,000 would be invested in the improvement of roads from all the various states, counties, boroughs and road organizations. In addition, thousands of farmers

in various sections of the country donated their service to the actual work of improving the nearby roads in order to demonstrate just what can be done by concentrated work.

Logan Waller Page, the President of the American Association for Highway Improvement, whose convention was held at Richmond, Nov. 20 to 23 inclusive, says that the proclamation of Governor Mann will result in a crystallization of the sentiment for good roads throughout Virginia and, when followed by similar proclamations in other states, will produce the same effect throughout the country. J. E. Pennybacker, Jr., the executive secretary of the association, and Charles P. Light the chief field representative and organizer, traveled through the country and prepared everything in readiness for "Good Roads Week" throughout the country. Immediately following the general demonstration, the congress of the American Association for Highway Improvement and its allied organization was held at Richmond.

After calling attention to the fact that the American Association for Highway Improvement held its first annual road congress in Richmond, Nov. 20 to 23, "for the purpose of bringing to the solution of the many difficult problems connected with the improvement of the public roads the combined knowledge and experience of the men who have devoted themselves to a study of this important question," Governor Mann's proclamation says:

"Whereas, the President of the United States will be our honored guest and will address the Congress upon that important occasion;

"And whereas, the improvement of public roads throughout Virginia and their proper care and maintenance will result in greatly increased prosperity and add immeasurably to the welfare of our people;

"Therefore, I, William Hodges Mann, Governor of Virginia, do hereby request the people of this Commonwealth, and especially those charged with the management of our public roads, to attend and participate in the American Road Congress hereinbefore mentioned.

"I furthermore urge upon all civic organizations, public schools, churches, the press and all other agencies within the Commonwealth that serve to promote human welfare, to set apart the week beginning Nov. 13, 1911, which immediately precedes the Congress, as "Good Roads Week," and during that period to devote their united efforts to a furtherance of the movement for better roads and particularly to the accomplishment of some practical result within the zone of their influence."

The proclamation issued by Governor Mann is the first ever issued by the chief executive officer of a state in the good roads or any other similar movement. The conference was a great success.

SEWAGE-IRRIGATION IN PARIS

It may come as a revelation to some that the sewage of Paris has permitted the turning into profitable, in fact, exceedingly valuable market gardens of 35,000 acres of land which previously was useless. By means of a large conduit, the sewage is carried in a subterranean stream through Paris to Clichy on the outskirts, where it is pumped into two great distributing mains. Both of these are used to distribute the water to the market gardens situated on the peninsula formed by the River Seine not far from Rouen. As an example of the way the irrigating is done, on the truck farm at Asnières owned by the municipality, there is a brick sluice, provided with gates about thirty feet apart on each side, which let the water into channels to carry it all through the garden. At the end of the sluice are filters which send the remaining sewage into the Seine purified.

This irrigated land is mostly owned by the city or by rich men who rent it to peasants. It has been converted into one of the chief revenue-bearing sections of agricultural France, and all through the utilization of a waste product, as it is generally considered.

COMMENTS ON INSPECTION BILL

The Committee on Legislation of the American Association agree in the main with the provisions of the bill as outlined on page 45, but desire certain minor modifications in the interest of reasonableness and practicability. Among these are the following: The bill says that imported stock shall have been inspected and found free from injurious plant diseases and insect pests. This should read, "apparently free," for no inspection agency, however careful, can guarantee an absolutely clean bill of health.

Section 6 should clearly distinguish what import stock is. When does import stock cease to be import stock? It is unreasonable to class as import stock such goods as have passed entry and have been received by the nurserymen and possibly mixed with home grown stock for the filling of orders. The committee is of the opinion that import stock should be regarded as domestic stock after it has passed entry and examination as to health.

Under Section 8 the present bill is not sufficiently specific in regard to insects already introduced into the United States. . . . As it stands the clause which reads "not there-to-fore widely prevalent or distributed within and throughout" might be interpreted to include a number of insect and plant disease enemies already well established, but possibly not widely distributed. The committee wishes this clause changed to read, "or any injurious insect new to the United States," etc.

Under the latter part of Section 8 providing for the public hearings before quarantining, the committee desires to incorporate a provision that notice shall be given by the Department of Agriculture directly to the Legislative Committee of the Association of Nurserymen, so that there may be no possibility of a hearing going by default. This notice should give a ten days limit in which to meet its requirements. This also should cover the operation of domestic quarantine.

These features are the principal points of difference at present between the legislative committee of the Association and the authorities of the Department of Agriculture interested in the framing of the bill.

It is deemed of utmost importance by the Legislative Committee that in case of the proposed quarantine of any foreign or domestic nursery region, on account of the presence of a dangerous pest the committee should be notified and given opportunity to go over the situation with the authorities in order that such regulations as are imposed do not work unnecessary hardships upon the trade. It occasionally happens that the views of the scientist are not practical and the feasibility of restrictive provision cannot be passed upon intelligently by anyone not directly associated with nursery trade interests.

Chairman Pitkin of the American Association of Nurserymen who was commissioned by the Society with "*full power and authority to act for it during the coming year in all matters of Federal legislation.*" has been actively engaged in considering the provisions of this bill for some time. Contrary to the understanding of the committee it was introduced before the points above were discussed or the bill had been accepted by Chairman Pitkin and his committee. The features noted must be incorporated before the bill is acceptable to the nurserymen.

AMERICAN ASSOCIATION OF NURSERYMEN

ANNOUNCEMENT OF THE SOCIETY

The thirty-seventh anniversary of this well known organization will be celebrated this year in the historic city of Boston, Mass., June 12-14 next.

The committee on arrangements has selected the Hotel Brunswick, one of Boston's most famous hostelrys, as

headquarters, where reasonable rates are offered on both the American and European plans, with the best accommodations for the convention. The resident members of the committee are satisfied that the arrangement is a most excellent one, and that members will be pleased.

It is believed by many that this gathering of the American Association will be as largely attended as any previous one, indeed some are sanguine enough to predict that the attendance will exceed that for several years past. Boston is an attractive city. It possesses many charms for members of the Association aside from its numerous historic associations, and members living in the extreme West will do well to make this an opportunity for spending the annual vacation. The Western roads will sell excursion or tourist tickets which will be more advantageous to members, all things considered, than the very limited reduction allowed under the certificate plan, which latter does not commend itself to the committee on arrangements.

The program, in the hands of Mr. C. J. Maloy of Rochester, N. Y., will contain good things; and Mr. A. E. Robinson, Bedford, Mass., is chairman of committee on exhibits. Those intending to exhibit are advised to get into early touch with the last named gentleman. The chairman of the entertainment committee is Mr. J. Woodward Manning, N. Wilmington, Mass., and members need not feel at all anxious about the success of this feature of the occasion.

The vice-presidents of the various states are reminded that at the St. Louis Convention last year it was agreed that each vice-president should consider himself a committee of one to procure new members. This arrangement is a good one, and if each official will rise to the occasion there is no reason why each one may not turn in at least half a dozen new members from his own state. This would mean a very substantial increase in the membership. The result of this personal campaign on behalf of the vice-presidents will be watched with interest, a fact which should give additional stimulus to the canvass.

Those seeking information regarding the American Association of Nurserymen and the convention should address Secretary John Hall, 204 Granite Bldg., Rochester, N. Y. There is no reason why every reputable nurseryman in this country should not become identified with it, since its record shows what an amount it has accomplished for the nursery business in general. Patrons of the Badge Book are exhorted to give the matter of copy for the same their early attention so as to afford ample time for satisfactory publication.

JOHN HALL, Secretary.

MOTHER OF PRES. J. H. DAYTON PASSES AWAY

Painesville papers announce the death of Mrs. M. A. Dayton, aged 76 years, a well-known and highly respected resident of Jackson street, at 1 o'clock Sunday afternoon, January 24. The funeral services were held from the Church of Christ, Tuesday afternoon at 2 o'clock.

Mrs. Dayton is survived by three sons, J. H. Dayton of the Storrs & Harrison Co. and president of the American Association of Nurserymen, James E. Dayton also of Painesville, and T. B. Dayton of Willoughby. She was prominent in church work in Painesville.

NATIONAL NURSERYMAN,

We are more than pleased to enclose our dollar for next year on your paper. Since starting in the '90's as a nursery proprietor, there never has been a time when the writer couldn't find his money's worth reading the NATIONAL NURSERYMAN. Here's for a "bully" New Year to you!

C. H. MERRIFIELD, Secy.

Bloomington (Mich.) Nursery & Orchard Co.

P. S.—We need your advertising rates.

Mich.

The National Nurseryman

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Stocks of all kinds. It circulates throughout the United States,
Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.;
secretary, Thomas B. Meehan, Dreshertown, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, Charles J. Brown,
Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in
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Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.;
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National Association of Retail Nurserymen—President, E. S. Osborne, Rochester,
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Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-
treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.
Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary,
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Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.;
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Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secre-
tary-treasurer, John S. Kerr, Sherman, Texas.
Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.;
secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second
Wednesday in December.

THE DELICIOUS APPLE

This question was asked by the writer
the other day of an eminent physician
who is a dietetic specialist, in other words,
one who makes a study of the influence
of food on the human body. "Do you recommend the free
use of uncooked apples by a patient who is able to eat acid
fruits, but who may have what is called a sensitive digestion?"
"Yes, if I know my patient and my apple," was the reply.
He then went on to explain that there was a vast difference
in the relative digestibility as between an apple with a but-
tery, melting texture, and a specimen which was high in
fibre. The presence or amount of fibre in the apple was an
exceedingly important factor in his judgment. In this con-
nection, we recall testing several years ago a number of
varieties of apples with a view of ascertaining their value for
evaporating purposes. We found that the factor of variabil-
ity ranged from five to fifteen per cent in the amount of solids
in different varieties.

The reasoning of our friend the physician appealed to us
very strongly; for we have keen and unpleasant recollections
of the effect of the fibrous, corky specimens which did not
"set well," in fact, rested so uncomfortably as to remind
the eater of sodden biscuits or an overload of pork and beans.

This leads us to say that an apple which makes the right
sort of appeal to us as a before breakfast or after luncheon
fruit is the Delicious. We are free to say that this variety
needs little help of ours in the way of extolling its merits;
for it is being popularized by the most active publicists in
the nursery world, the Messrs. Stark Brothers of Louisiana,
Missouri. They, like good advertisers, realize that nothing
speaks quite as convincingly as a sample of "the goods"
themselves, and we are glad to affirm that a box of Delicious
is about as an attractive looking object as the artist can
imagine, and as an appetite teaser, after the first bite, is
practically unexcelled.

Its shining, mottled crimson and yellow coat is under-
laid with a melting, delicate flavored flesh that stands as a
perennial temptation to overeating. We must admit, how-
ever, that for many years, perhaps because of boyhood's
associations, our affections have been centered on that king
of dessert apples, the McIntosh. Yet now in these our days
of maturer judgment, we are wont to feel that Miss McIntosh
has a strong rival, and if we were to offer a verdict of our
better half, at the moment an invalid, it would be unquali-
fiedly in favor of Delicious.

WHITE WASH VERSUS OYSTER SHELL SCALE

The experiments conducted by the Horti-
culturist of the Dominion Experimental
Farm at Ottawa appear to prove con-
clusively that white wash is a simple
and effective remedy for oyster shell
scale, or frequently called oyster shell bark louse. The
method of procedure is to make a wash using forty pounds
of lime, forty gallons of water, and eight pounds of salt.
This should be sprayed on the tree immediately after the
leaves fall, and another application made as soon as the first
has dried. The salt does not seem to be an absolutely
necessary constituent of the formula, but has the effect of
making the bark of the tree cleaner and brighter.

This lime wash loosens the scales and breaks their attachment to the twigs. They are washed off by rain and snow-fall. When trees are sprayed with lime and sulphur in early spring, while yet in a dormant condition, the remedy seems to be intensified, and any scales which escape the lime wash will probably be removed by the lime-sulphur. But the lime-sulphur alone does not seem to be effective.

YIELDS OF INDIVIDUAL APPLE TREES

It is a matter of common observation and experience that different trees of the same variety of apple may express marked variation in their productivity year after year. Certain trees may be noted for their free and regular bear-

ing habits, while others of the same variety become marked individuals because of sparse bearing habits. The individuality of trees in reference to the quality of the fruit has also been noted, and is now the subject of considerable comment and discussion.

Although these general observations have been accepted for a good many years, it has been difficult to secure data to back them up unequivocally. The report of the Horticulturist of the Dominion Experimental Farm for 1911 contains a considerable amount of conclusive evidence on this very topic. Records of the yields of individual trees of thirty-six varieties of apples have been kept for over twenty years, or practically from the time the trees came into bearing. These records present some exceedingly interesting figures. In certain cases an individual has been persistently unproductive. In other cases another individual of the same variety has been consistently productive. For instance in two trees of Yellow Transparent, the yield records of which cover twenty years, we find that in that period one produced 67 bushels of apples, while the other produced only 17. In three trees of Duchess, two produced practically 100 bushels each, while a third only produced 30 bushels in a period of twenty years. With Wealthy, one tree produced about 75 bushels, while another produced just about half that quantity. With McIntosh, there is even greater variation. One tree produced 95 bushels, while a second produced only 20 bushels during the twenty year period of observation. And so it goes with the remainder of the trees which were recorded during the period.

There seems to be no question as to the variability of individuals in reference to quantity and quality of product. The more important point is whether the distinctive characters and habits of the individuals will be transmitted when propagated by budding or grafting. There does not seem to be either unanimity of opinion on this subject, or satisfactory data to support statements one way or the other. At a recent meeting of the New York State Fruit Growers' Association, the Horticulturist of the Geneva Experiment Station was inclined to a negative view, and stated that the burden of proof lay upon the advocates of the theory, and that as yet conclusive evidence was wanting that bearing characteristics, quality characteristics, would be transmitted by asexual reproduction. In the meantime, there is a large amount of interest in so called pedigreed varieties. It is unquestionably a good line to follow. Whether it will do all that its advocates claim seems to be an open question.

REPORT OF COMMITTEE ON GRADING NURSERY STOCK

PARSONS, KANSAS, Jan. 16, 1912.

At the last annual meeting of the American Association of Nurserymen held at St. Louis, Mo., in June, 1911, a motion was passed appointing a committee to agree upon a uniform set of grades for fruit trees, to be adopted by the Association. The motion went further and required the committee to have the same printed in the trade journals at least one month prior to the next annual meeting, and in compliance with that motion, your committee presents the following grades.

All grades of trees shall be of fair shape, branched, well rooted. Caliper to govern and measurements taken two inches from the crown or bud, of the following grades:

Apple: 11-16 in. and up, 5 ft. and up; 5-8 to 11-16 in., 4 ft. and up; 1-2 to 5-8 in., 3½ ft. and up; ¾ to ½ in., 3 to 4 ft., whips included.

Cherry: ¾ in. and up, 4½ ft. and up; ⅝ to ¾ in., 4 ft. and up; ½ to ⅝ in., 3 ft. and up; ⅜ to ½ in., 2½ ft. and up.

Standard Pear: ¾ in. and up, 5 ft. and up; ⅝ to ¾ in., 4 ft. and up; ½ to ⅝ in., 3½ ft. and up; ⅜ to ½ in., 3 ft. and up.

Dwarf Pear: ¾ in. and up, 3 ft. and up; ⅝ to ¾ in., 3 ft. and up; ½ to ⅝ in., 2½ ft. and up; ⅜ to ½ in., 2 ft. and up.

Two year Plum: ¾ in. and up, 5 ft. and up; ⅝ to ¾ in., 4 ft. and up; ½ to ⅝ in., 3½ ft. and up; ⅜ to ½ in., 3 ft. and up.

One year Peach, Plum and Apricot: 11-16 in. and up, 5 ft. and up; 9-16 to 11-16 in., 4 ft. and up; 7-16 to 9-16 in., 3 ft. and up; 5-16 to 7-16 in., 2 ft. and up.

Some exceptions to the above may be made on such varieties as are known to the trade to be light growers, such as Yellow Transparent, Duchess apple, Seckel pear, English Morello cherry, etc., or from weather conditions affecting their growth, but such exceptions *shall* be noted in the printed price list issued by each grower or in their correspondence regarding all sales.

We would further say that the grades as named were adopted by the Western Association of Nurserymen at their meeting held in Kansas City in December, 1911.

It has been the aim of the committee to adhere to the grades generally used by the majority of the nurserymen of the Association, and as most of these grades have been a standard for years, there should be no trouble in agreeing upon its adoption. The main object was to cut the number of grades to the minimum and to make enough distinction between each grade.

Respectfully submitted,

E. P. BERNARDIN,

E. S. WELCH,

W. T. MALONEY,

Committee.

The Mountain View Nursery Co., of Williamsport, Maryland, has moved their offices to Potomac Street, Williamsport. This is the main street of the city and located immediately on the trolley lines and is most accessible to visitors and customers.

THE CIDER INDUSTRY IN ONTARIO

Suggestions by an Expert, L. Meunier, Formerly of France

Great improvements have taken place within the last few years with regard to the growing and shipping of Apples. Thanks to your Fruit Growers Associations, Canada is coming rapidly to the fore, and you can now supply the European markets with fruit in better condition than their own. Some Canadian growers think that the Canadian Apples have a bad reputation on the other side, but in this I do not agree with them. To give you an idea of the popularity of your fruit, not only on the British market, but even in France, I will tell you what I heard in Paris. A peddler stood in a crowded street with a fine load of apples. "How pretty they look," said a lady passing by. "They are Canadian apples, are they not?"

It is quite apparent that you take better care of your orchard than the growers in the Old Country. Here pruning and spraying are the rule, as well as good packing. And yet you complain because you cannot compete with the Australian and Californian Growers. They pack in boxes and it seems that it suits the dealers better. But the trouble is chiefly caused by the culls being mixed with the better grades. Notwithstanding the greatest care you get a certain amount of scabby, worm-eaten, ill-shaped apples, as well as sound wind-falls. Practically, these culls have no value whilst the first and second grade are always sold at reasonable prices. Temptation is inherent to human nature, and in most cases the packers try to raise the culls up to the level of the first or at least second grade. As long as it is not possible to turn the culls to good account, it will be very difficult to avoid this trouble.

Some months ago, when in London, I asked an apple dealer, "How can you explain the superiority of the Australian apples sold on the English market?" He answered that in Australia they use the culls to feed hogs and make cider, only shipping the best grade. Can you do the same and will it pay? Let us study the question.

There are already many growers who feed the culls to their hogs. Let us consider what 10 pounds of culls would produce in that way. Apples are very poor in nitrogen and you can't build up a pound of flesh without a good deal of that element. I calculated that 60 pounds of green fruit are needed to make a pound of flesh. If you estimate it at 12 cents a pound you see that 10 pounds of green fruit will only give you a return of 2 cents.

Let us now turn our attention to cider-making. The juice of culls is the same as the juice of sound apples, the only difference being in the appearance of the fruit. Therefore, there is no reason why you could not make good cider with cleaned culls.

What is the wholesale price of cider in Toronto, for instance? Sixteen cents a gallon on the average, and how many pounds are required to make a gallon. By the French way, not more than 10 pounds. In this Province of Ontario, even for a very small factory, the cost of the making and shipping will not exceed eight cents a gallon. Therefore,

turned into cider, your culls will give you eight cents per ten pounds.

And now the pomace (that is to say the pressed apples) should not be thrown away as is generally done. This pomace is much richer in nitrogen than the apple itself, as the nitrogen, being insoluble, is not crushed out with the juice. In other words, you can fatten nearly as many hogs with your pressed apples as with the green apples themselves. Every ten pounds of green fruit will consequently give you a return of one cent at least by feeding hogs with the pomace. That is to say that ten pounds of culls will give you a return of nine cents, by making cider and feeding hogs. It will pay you \$1.35 a barrel, which shows that they are worth saving and profitable without shipping with the better grades. The culls will pay 90 cents per 100 pounds whereas the driers and canning factories give you only 50 cents per 100 pounds for high-grade culls, and very often they could do no better without losing money. Therefore cider making is a profitable business, and yet I have heard of many failures in this country.

When in Montreal some time ago, I said to friends that there was no better drink than cider, and I backed my opinion with quotations of celebrated English and French people. My friends ordered a barrel of cider. The day after they received it, very naturally, I went to pay them a visit. As soon as I arrived I was told that they had sent a barrel of vinegar by mistake. My friends thought it was vinegar, but it was really a very hard, very sour and poor quality of cider. To get a fair price you don't only want to make cider, but to make good cider, and to do this you want the right apparatus and process.

This Province has to get rid every year of several million bushels of culls. If we turn it into cider will there be enough people to drink it, and supposing so, what will be the price? "Is there no market in the world but that of the Province?" To get important sales and high prices you have to reach other countries. Great Britain, Quebec and South America are fit markets for cider, but any cider is not fit for their markets, and if you don't ship the right cider to the right place, it will always be a failure. The wholesale price in London is on the average 28 cents a gallon. Therefore, by shipping to England you can obtain a much higher profit than by selling your cider here. Some Nova Scotian and Ontario cider makers have fully realized this fact, and, thanks to them, the exportation of Canadian cider has increased very quickly.

In 1903 they shipped cider to the value of \$810.00. In 1906 this export had increased to \$9,400, while in 1909, 135,244 gallons were shipped, representing a value of \$27,953. This is just a drop to quench the thirst of John Bull. And yet, do not think that John will drink every kind of cider. If you don't send him the right one, don't expect to make him a good customer. English people like Devonshire cider. You can't change their minds. You have nothing

to do but make cider of the same kind, if you intend to supply the English market. Can you do so and succeed? Certainly. Many of your varieties of apples suit this industry, but you must employ the right method, as a certain Nova Scotian cider maker already does.

And, now let us look at the Montreal market. Nearly all the dealers I saw in this town say that they have more demand than supply, and the price in Montreal is much higher than in Toronto, and besides the consumption of cider by each inhabitant is much greater in Quebec than in Ontario. Is there a kind of cider preferred by the French Canadians? Certainly, and as you may guess they like the cider prepared in the French way. Generally the Canadian apples are not fit for the making of this cider, and the success will greatly depend upon the choice of the varieties. The rule in France is to blend at least three kinds, one acid, one sweet, and one bitter. On the average the Canadian apples are acid varieties, and so you have to make a selection. I would suggest the following blending as suitable—Spy, Talman Sweet and some crab apples.

Let us now talk about a third kind of cider, that is the German cider. The makers of Frankfort and Stuttgart call it Aepfelwein, that is to say apple wine, and their process is such that they make a kind of cider which reminds one of white wine. The great advantage of the German process is that one can employ every variety. Some of the German factories are very important and supply not only the European markets, but also some African and South-American countries. They ship to the latter hundreds of thousands of gallons and the price of cider in Frankfort is more than 20 cents a gallon. From that statement you can see the advantages offered by the South American market.

I will now leave this question of the cider industry and try to resolve the following problems: Are there any other ways in which we may turn the apple culls to very good account? Yes, we can make apple-juices, liqueurs, apple cakes, etc., and some of these industries will pay as well, and perhaps better, than cider-making. Thanks to the campaign of temperance, there is now a big demand for apple juice. Many of the apple-juices sold, however, are far from being free from chemicals and preservatives, and in that way they are much more injurious than the strongest cider. But there are methods to make apple juice without preservatives.

In France a sweet liqueur made with apples has a great sale, and it is quite apparent that with your delicious eating apples, as Snow, Spy and King, you could do the same. Apple cakes are sold in England at the rate of 10 cents a pound, and you can make them with cleaned culls. In short, you have many good ways to make a lot of money from the culls, and doing so you will at the same time get a higher price for your sound apples. The Co-operative Fruit Growers Associations are thriving in Ontario. It seems to me that if they were to take this matter of cider-making in hand it would be very profitable, and a great benefit to the Canadian fruit growers.

"Well pleased with the paper. Enclosing check for \$1.00. Enter us for another year.

G. L. WELCH & Co.,
Fremont, Neb.

MEETING OF WESTERN NEW YORK HORTICULTURAL SOCIETY

This grand old organization, with its history of good work covering more than half a century and its present membership of fifteen or sixteen hundred persons, closed an exceedingly successful meeting, marking its fifty-sixth annual session, on the 26th instant at Rochester, New York. The Association has been promoted and supported in considerable measure for many years by many of the well known nurserymen of Rochester and vicinity. Among those who were present, the well known faces of William Pitkin, Irving Rouse, C. M. Hooker, E. A. Osborne, Messrs Hawk and representatives from the outlying districts of Dansville, Newark, and Geneva, were noted.

Mr. W. C. Barry, for thirty years or more president of the Society, presided with his usual felicity, ably assisted by Secretary John Hall. The election of officers resulted in returning Mr. Barry and Mr. Hall to their respective offices.

One of the successful features of the session was a banquet on Thursday evening, the 25th, at which some four hundred members of the Society sat down together, and after enjoying a good supper, listened to addresses by Mr. J. S. Williamson, Quincy, Illinois; R. D. Graham, Grand Rapids, Michigan; and the well known Judge Lynn of Rochester. The editor of this paper had the distinction of acting as toastmaster on this gala occasion.

WINE GROWERS MEET

President W. E. Hildreth of the American Wine Growers' Association announces that the time of the annual meeting has been changed from December to the last Thursday in February. Accordingly, the next meeting of the Association will take place in New York on February 29th, 1912.

GRAPE STORAGE EXPERIMENTS

The Bureau of Plant Industry, through its Division of Pomology, is experimenting in the storage and shipment of California grapes. It has been determined thus far that the red wood sawdust of California is not only a satisfactory substitute for the Spanish ground cork, but gives even better results than that standard packing material. In shipping these grapes, they are first precooled, then placed in the sawdust, and finally packed in large drums, holding thirty-five to forty pounds each. These drums are kept in cold storage, and forwarded as the market favors or discourages shipment.

REVENUE FROM ROADSIDE FRUIT TREES

The American consul, Mr. Robert J. Thompson, of Hanover, Germany, reports that the sales of fruit grown on the roadside trees adjoining the city of Hanover amounted this autumn to almost \$5,000. It is the German custom to plant pears, apples, and cherry trees, along the roadsides. These trees are cared for by the road supervisors, the crop is picked and sold, and the income is devoted to the maintenance of the road.

HOW TO FORCE LILACS

By B. B. C. FELIX of FELIX & DYKHUIS, Boskoop

One of the most popular shrubs for forcing is the Lilac. Their large trusses of fragrant flowers are universally admired and the erect way they carry their blooms gives them a stateliness of form and noble appearance which is not easily rivalled.

Before a Lilac can be forced into bloom it wants a period of rest. The plants when grown in pots go into a dormant state about the latter part of October. A well grown Lilac differs from a poorly grown one not always by its larger number or thickness of its branches. Both plants may look almost alike. Sometimes the shape and appearance are in favor of the badly grown one. The chief value lies in the way they are treated during the summer. They should be grown in such a way that they go into the dormant state early and yet have stored sufficient nourishment to feed a full sized flower. It is easy to grow a nice looking Lilac but hard to grow an easy flowering one. If the roots are allowed to grow over the pots they make a strong growth and a field of Lilacs grown in this way looks very healthy and fine as a rule, but their value for forcing is very doubtful.

When the Lilac plant goes into a dormant state in October nature has not yet fulfilled its task. Although the superficial observer sees nothing uncommon on the buds, inside of them there goes on a number of chemical processes that makes them ready for the coming spring. Not before the buds are fully prepared can a full sized flower be produced. In winter with its frost and snow, when all trees look apparently dead or asleep, nature continues to care for her children and prepares and develops them to objects of beauty which are admired by all of us. This secret, hidden process is of a great importance for the coming flower and must be considered when we think of anticipating the rules of nature.

Before the plants should be forced into flower it is necessary that the period of rest is sufficiently advanced. That's why a plant forced in January or February forces easier and gives better results than when forced in December.

To shorten this period of rest, freezing, hot water-treatment and ætherizing are applied with good results. Plants that have been exposed to frost have their period of rest shortened. For this reason it is advisable to heel the plants in outside so they are exposed to frost.

Hot water treatment is best applied in a basin of water of 85 to 95° Fahr. Only the buds and shoots need to be treated, the rootballs are left out. This treatment takes about 6 to 10 hours. If the temperature of the water is lower (70-80° Fahr.) 10 to 12 hours will be necessary. Plants that have been exposed to frost need shorter treatment.

Ætherizing is done in an airtight box in which æther is placed and vaporized. This treatment takes about 24 hours.

Although it is rather difficult to give definite rules for forcing Lilacs we shall try to explain in the following lines the most essential. It must, for the greatest part, be left

to the forcer to understand the exact needs of the plant and its requirements as to watering, airing and heating. We shall also explain how to insure Charles Dix its delicate lilac color, which is something unknown to the majority of Lilac forcers.

Lilacs can be had in bloom at Christmas but the success with them is not very sure when they are not previously exposed to one of the three ways to shorten its rest period. We would therefore advise not to bring more plants inside than is necessary, for the results are uncertain. The later the plants are brought inside the better. They force easier and make better flowers and trusses.

Lilacs need a high temperature and the idea of letting them come slow, or as some florists sometimes say "almost natural" is entirely wrong. They should be forced. The meaning of that word clearly expresses itself. To let them come slow is not forcing and the results are not the same as what can be expected of forced plants. When Lilacs flower outdoors they do not make the large trusses and flowers as when properly forced.

When the Lilacs are taken into the hothouse they should at once be given at least 80 to 90° Fahr. If it is not possible to give them as much heat from the greenhouse pipes and if there are other plants in the same house that do not require as much heat we would advise the placing of the Lilacs in one end of the house and having this part separated from the other part with boards, glass or canvas. Then to bring the heat of the division to the necessary temperature is it advisable to place a stove inside and on top of this a vessel of water. The heat of a stove is very favorable to lilac forcing. It makes the air dry where the boilers make it damp. Stove heat is very desirable. One has to spray abundantly 3 or 4 times a day through the branches and buds and also to have the rootballs in the pots sufficiently wet. On account of this spraying the surface of the soil will look rather wet, but this is deceptive; for the lower parts of the balls are sometimes too dry. On the other hand the balls should not be too wet. The plants do not consume much water in the first 8 days and if too wet the roots will get rotten. Here it is where the forcer should use his own judgment a great deal. He should know how much or how little to give. The buds have to be constantly kept moist. Within 10 to 12 days the buds break open and are about a finger in length. This is the time to lessen the heat until the trusses have attained their full size, which takes about 2½ weeks. The spraying should methodically be lessened at this time. When the flowers begin to expand, a very thin spray once or twice a day will be sufficient. If the flowers are open the spraying should be stopped. Spraying on the open trusses is ruinous to the blooms.

The last 8 to 10 days the Lilacs can get sufficient heat from the greenhouse pipes and it is only with dark, wet weather that the stove needs to be used. During forcing it is well to give them a little airing once in a while.

The variety Charles Dix has a very fine lavender color but if forced wrong turns to a dirty white, which is neither wanted nor desirable. To insure this variety its beautiful color it is necessary to place the plants cooler after the second week of forcing and in a place where it is possible to give them fresh air from the outside through the ventilation. This should not be done when it freezes. Charles Dix when flowering outdoors is always blue. Even those plants which do not show good color in forcing get the right color outside. This gave us the conclusion that forced plants that were exposed to outside air the last week of forcing would regain their natural color. And by doing so we were successful.

Mary Legraye, single white, is the easiest to force, consequently the earliest. After this variety comes Charles Dix, single lavender, and Souvenir de Louis Späth, single purple, Mad. Lemoine, double white, and President Grevy, double lavender. These are the varieties that give best satisfaction. Experiments in forcing a number of other varieties, some of which are beautiful out of doors, generally proved to be of no value for forcing. Neither did they make enough buds when grown in pots.

If in forcing Lilacs the above rules are carefully observed, a well grown Lilac plant is sure to give satisfaction and will prove a profitable plant to force. Many a good prepared Lilac is spoiled by wrong treatment, and the plants (or the firm who sold them) are generally blamed for the bad results.

If these lines may contribute to your success in forcing Lilacs we may, probably, all be benefited by it.

OUR MAILING LISTS—WHO ARE ENTITLED TO TRADE LISTS

The Trade List of the responsible nurseryman should go to responsible dealers only. Planters can afford to pay more profitable prices to the nurseryman than can the dealer. Nurserymen, under a ruinous system of competition, sell their stock at bankrupt prices—the result is cheap methods, cheap trees, and cheap men.

The scientific originator, the skillful propagator, and grower, the careful handler and honest distributor, should receive due reward for his service. The careless, unreliable grower or dealer in nursery stock should not be recognized by the legitimate grower. A large amount of nursery stock is sold to these irresponsible dealers, who by making little or no payment for same, are able to cut prices and demoralize the trade by giving the planters a low estimate of the cost of a tree and a poor opinion of the nursery business. A partial remedy against this hurtful abuse may be had by requiring cash with the order from all dealers who are not rated strictly A 1.

The laborer is worthy of his hire, and since the honest, efficient nurseryman is the most strenuous of all laborers, he should have his reward.

The dealer or retail merchant under prevailing conditions is a most important factor and should receive consideration. The planter is the ultimate consumer for whose convenience the trade is established and maintained, and who should be willing to support the trade by paying profitable prices.

The nurseryman as a producer, and the retailer as a distributor, are able to give valuable and efficient service to the planter in proportion to remuneration they receive from the planter for their service.

The issuance of trade lists indiscriminately to planters and to unworthy dealers is not only a menace to the business, but it has done much harm to horticulture and to all parties concerned.

E. W. KIRKPATRICK.

HIGH FARMING AND LOW PRICES

The Rural New-Yorker does not accept Professor Holden's advice recently offered to a group of New York capitalists in New York City, that high farming is to be a remedy for low prices. *The Rural New-Yorker* thinks that the more the farmers produce on a given area, the lower will be the price. "The pretty scheme for doubling crops without giving farmers a fair share is like the pleasant babble of a summer brook." *The Rural New-Yorker* believes that larger prices are to come from decreased expenses in marketing the farmer's products.

INTEREST IN STREET TREES

How difficult it is for towns and villages to maintain a sufficient interest in their street trees to keep these in healthy, growing condition and free from severe injury caused by attacks of insect and fungous enemies. At the present time, there are many firms and individuals practicing tree surgery, whose services are available. In addition, the villages and towns have equal rights in commanding the services of experiment station officials with the men living in the country. This fact is frequently overlooked, however. Many of the picturesque villages and small towns of New England and New York owe a great share of their beauty to the fine old trees, elms and maples and other forms, which were planted in early days. These trees frequently have passed their meridian and are deteriorating because of neglect in the matter of checking fungous and insect invasion. Departments of Horticulture in the state colleges are usually only too glad to cooperate in cases of this kind. Their services should be solicited.

ELECTRICITY FOR TREE PESTS

It is reported that certain progressive fruit growers in the State of Washington are attempting to electrocute their orchard insect enemies. One enterprising orchardist expects to wire his ten acre orchard and equip it with a storage battery and incandescent light globes of six candle power. These are netted with fine steel wire, coated with copper and tin alternately. The moths and night flying insects are killed as they come in contact with the electric circuit. This method raises the question as to whether the electrocuting agent will discriminate between beneficial and injurious insects.

Los Angeles holds a land and product exposition March 12-28, 1912. A feature of this exhibition will be a display of two million oranges, representing every citrus growing section of California, and other citrus producing states which may feel disposed to cooperate in assisting the exhibition.

Doings of Societies

CALIFORNIA STATE FRUIT GROWERS

The fortieth annual meeting of the California State Fruit Growers' Association was held in Santa Rosa, December 19-22, 1911. The program was spread over four days, and was filled with matter of practical interest to orchardists and nurserymen. The relation of the county commissioner to the nurseryman was discussed by Mr. George C. Roeding, Fresno. Many other features of interest to fruit producers were presented.

TEXAS

The aim of the Texas State Horticultural Society is to secure enough new members to bring the membership up to one thousand. As a beginning, each member was urged to secure at least one new name before the mid-winter meeting of the Society, which was to take place in Houston on the 18th and 19th of January but was cancelled owing to the epidemic of meningitis.

ALABAMA

The ninth annual meeting of the Alabama State Horticultural Society took place at Jasper late in January. The program occupied three days. The practical side of horticulture was included in the form of demonstrations during the last session. Following an address on "The Use of Dynamite for Tree Planting," by A. L. Crowe of Atlanta, the members of the Society had an opportunity to see this method put into practice, and also to witness demonstrations of spraying, pruning, and planting.

PACIFIC COAST ASSOCIATION OF NURSERYMEN

An attractive looking volume which has recently come to the editor's desk is the report of the 1911 meetings of the Pacific Coast Association of Nurserymen held at San Jose, California, June 21-23. These proceedings fill 125 pages, and the list of members shows a thriving organization, as far as numbers are concerned.

Pres. George C. Roeding of Fresno, California, in his address noted the influence which the nurseryman has exerted, especially in the rural communities, upon the progress of things material and esthetic. He stated that he believes each of the far western states should have its association to affiliate with the larger association. In discussing transportation difficulties, Mr. Roeding said that he thought oftentimes relief could be obtained by merely calling the attention of the railroad company—a business organization open to reason—to the abuses existing in its system. The following quotation from Mr. Roeding's address will add the opinion of another experienced nurseryman on a subject discussed in the last issue of THE NATIONAL NURSERYMAN:

"What are, after all, the essentials to success? Briefly as follows:

"Trees must be true to name.

"They must be well grown.

"They must be free from all pests.

"They must be well packed to insure their safe arrival at destination.

"Is this all? No! A discriminating public must be

called upon to buy the stock on which you have bestowed so much care and attention, either through catalogues and advertising, or through agents. All of this means a vast expenditure of money. No one present here will deny that this is an actual statement of facts. Then why is it that the purchaser of nursery stock should have the general impression that it costs nothing to grow trees, and why should the nurseryman further promulgate this idea by the reprehensible practice of agreeing to replace stock—free of charge—that fails to grow? I hope that the members of this association will continue to bear in mind that such practices not only cheapen them in the eyes of the public, but detract from the general tone of the business. Never forget this fact in determining the prices of your product to the planter, that the prices are not regulated by the cost of production, but by whatever stocks are in demand. You all know that such trees as you fail to sell are valueless and serve no other purpose than so much brush for firewood."

After the President's address, the convention listened to a group of four papers relating to legislation and inspection. Mr. M. McDonald of Orenco, Oregon, noted the influence which the Pacific Coast Association of Nurserymen has had in creating good feeling between the nurserymen and horticultural inspectors. In discussing destructive diseases of nursery stock, so many of which have been brought into the United States from foreign countries, Mr. John S. Armstrong of Ontario, California, declared himself in favor of "absolute prohibition of entry of stock into the United States, excepting under the careful supervision of experts of the Federal Agricultural Departments, and even then it might be limited to new or little known fruits and plants, thus stimulating the production of all plants to American soil."

The Commissioner of Horticulture for California, Mr. J. W. Jeffrey, suggested that nurserymen as a body are not doing what they might to influence legislation in their own favor. Mr. S. A. Miller of Milton, Oregon, speaking from the nurseryman's standpoint, expressed a similar opinion, and was not inclined to lay the blame entirely upon the legislators for the laws which frequently allow nursery stock to perish on account of being held a long time awaiting inspection. At the last session, a resolution presented by Mr. McDonald was unanimously adopted to the effect that a committee be appointed to consider the advisability of securing the services of experts in entomology and plant pathology to assist in solving some of the problems confronting nurserymen.

The remainder of the report discusses a variety of subjects, among which are "Pedigreed Stock, Does It Pay?" "The Value of Cleaning Seedlings Before Planting," and "Why the Nurseryman Should Stand in the Position of an Educator to the Fruit Growers." Included in the list of speakers, were Prof. E. J. Wickson of the University of California, P. A. Dix, Salt Lake City, and Leonard Coates, Morganhill, California.

THE NATIONAL NURSERYMAN Pub. Co.,

Enclosed find \$1.00 which please place to my credit for subscription I appreciate your journal.

Yours very truly,

California, Mo.

E. HABEGGER.

Our Book Table

"The Avocado" is the title of an attractively illustrated pamphlet recently received from the West India Gardens of Altadena, California. It is quite a complete monograph on the history, culture, propagation, and food value of this interesting tropical fruit.

SCOTTISH GARDENS, by Sir Herbert Maxwell. Longmans, Green & Co., New York. (\$2.25 net.)

This book contains 32 colored plates from pastel drawings done especially for this work by Miss M. G. W. Wilson, member of the Pastel Society and of the Scottish Society of Artists.

A GIRL OF THE LIMBERLOST, by Gene Stratton Porter. Doubleday, Page & Co., Garden City, N. Y. Illustrated. Fixed price \$1.20 (postage 12c).

This book was published two and a half years ago and plans have been completed for printing the 189th thousand, which shows it holds the public interest.

HOW TO GROW AND MARKET FRUIT, published by Harrison's Nurseries, Berlin, Md. 130 pages.

We are in receipt of an attractive volume from the Harrison's Nurseries, under the above title. This is, in fact, a handbook of orcharding. It covers the various details of planting, cultivating, pruning, suppressing insects and diseases, in addition to the handling and marketing of the fruit. The volume has been prepared by the McFarland Publicity Service, and reflects credit upon the makers. It will undoubtedly be greatly appreciated by the planters of Harrison's goods.

BEGINNINGS IN AGRICULTURE, Albert Russell Mann. Published by the Macmillan Company, New York, 1911. 5 x 7½ inches. 341 pages. Illustrated. Price, \$.75.

In this day of agricultural education in graded and high schools, such an interesting and valuable contribution to the list of text books in agriculture as is Professor Mann's recent volume cannot fail to attract attention. This book is intended for use in the seventh and eighth grades, and one might think the writer had had years of experience in teaching children of that age, so well suited is the style of the book to their understanding. However, it is so pleasantly written that it furnishes agreeable reading for old as well as young.

There are four main divisions of the book, all profusely illustrated: The Affairs of Agriculture; The Soil; Farm Plants; Farm Animals. Each of the forty-one chapters is concluded with a few problems, which form an applied review of the lessons presented in the chapter. Observation is one of the main things sought after in the volume. While the problems given are presented from the standpoint of the farmer's boy, the lessons which are taught thereby are ones which the city child too should know, and which he would not have the same opportunities to learn by himself that the country lad would.

WHAT ENGLAND CAN TEACH US ABOUT GARDENING, by Wilhelm Miller, Ph.D. Published by Doubleday, Page & Company, 1911. 7¼ x 10¼ inches. 351 pages. Illustrated. \$2.50.

The adjectives "interesting" and "attractive" seem but weak and ineffective when used to describe this work from Mr. Wilhelm Miller's pen. Not only are the illustrations a delight in themselves, but every one of the twenty-six chapters contains good reading, even for persons who are not actively engaged in gardening. The reader who has not visited England is filled with a great desire to see this country of gardens; the one who has witnessed these scenes of beauty is once again thrilled with pleasure in glancing through the pages of this volume; and he who has never had the subject called to his attention may be vastly surprised to learn how far England has outstripped us in ornamental gardening.

One of the chief ideas Mr. Miller would leave with his readers is that Americans must use American productions to secure satisfactory effects, and not the great quantities of foreign-grown nursery stock, so much of which never fits into its surroundings in this country. Another noteworthy fact is that a large number of plants which play a part in English gardening effects are natives of the United States, and do better here than they do across the sea. Mr. Miller lays stress on the importance of water in gardening, for its own charm, and for the beauty of the flowers which, when planted beside it, are mirrored in its depths, repeating their loveliness. A delightful chapter is that on English effects with long-lived bulbs. This notes the vigor of this class of plants, which, together with the fact that they are so inexpensive, ought to attract more people to them. It is stated that there is a daffodil field near Trenton, New Jersey, which has been blooming annually for a hundred years without care. Chapter three on "Living Outdoors" tells "how each one of us can get more fun out of life and better health without loss of efficiency or waiting for an increased income."

The make-up of the book is very attractive. It is a large volume, bound in a pleasant shade of green, with good coarse print. As to illustrations, there are over one hundred photographic plates and eight plates in color, picturing the different kinds of gardening described in the volume.

Dr. Miller has performed an excellent service for American Horticulture.

FLORIDA CITRUS EXCHANGE

Indicative of the progressiveness of the Florida Citrus Exchange, we learn that this organization has contracted with the McFarland Publicity Service of Harrisburg for an extensive advertising campaign on behalf of grape fruit, oranges, and other subtropical fruit grown in Florida, and marketed through the Exchange organization. The McFarland Publicity Service is rapidly developing new connections, and with a strong staff of experienced men, it is extending its service very rapidly. A considerable number of nurserymen are already using this bureau in connection with their advertising.

Mr. Wallace of D. S. Lake, Shenandoah, Iowa, called on Rochester Nurseryman on his annual eastern trip, the latter part of November.

"Of course, I want THE NATIONAL NURSERYMAN."

New York.

D. S. GEORGE.

Catalogues Received

Turkey Creek Nurseries, Macclenny, Fla. Descriptive catalogue, 1911-1912.

Harrison's Nurseries, Berlin, Md. Mailing card, announcing "How to Grow and Market Fruit." Price list of trees and plants.

Glen Saint Mary Nurseries, Glen Saint Mary, Fla. Price list and description of the Lue Gim Gong orange.

The Griffing Brothers Company, Jacksonville, Fla. Griffing's 1912 Tree Book.

Huntsville Wholesale Nurseries, Huntsville, Ala. Price list, December, 1911.

B. G. Pratt Company, New York. "Scalecide," the Tree Saver.

Frank H. Lewis, Pascagoula, Miss. Price list pecan nursery stock and paper shell pecans.

Miss H. Hemus, Holdfast, Upton-on-Severn, England. Catalogue of sweet peas.

Mount Arbor Nurseries, Shenandoah, Iowa. Winter wholesale price list, 1911 and 1912.

Gray's Nursery, Pekin, Ind. Wholesale catalogue and price list of fruit trees, berry plants, cuttings, etc.

W. N. Scarff, New Carlisle, Ohio. "A True Corn Story."

California Nursery Co., Niles, Calif. Catalogue No. 3 Price List.

Conrad Appel, Darmstadt, Germany. "Special Offer."

Felix & Dykhuis, Boskoop, Holland. "How to Force Lilacs."

"Alma" Nurseries, Oudenbosch, Holland. Trade catalogue, 1911-1912.

J. Van Lindley Nursery Co., Pomona, N. C. Surplus list wholesale only.

J. Heins' Sons, Halstenbek, Germany. Wholesale price list. Catalogue, somewhat unique.

Elizabeth Nursery Co., Elizabeth, N. J. Wholesale trade list.

Ellwanger & Barry, Rochester, N. Y. Trade list for Nurserymen only.

Saitama Engel & Co., Toyono, Kitakatsushika, Saitama, Japan. Very attractive, illustrated catalogue of plants, bulbs and seeds.

Osman & Coy Ltd., Horticultural Sundriesman. Commercial St. London E. Catalogue of New Bulb Bowls.

John Mooy & Son, Bulb Growers & Exporters. Haarlem, Holland.

G. H. Richards, Borough High St., London S. E. Catalogue of Bulb, Rose and Flower Bowls.

Levavasseur & Sons, Orleans, and Ussy, France. Abridged trade list for 1911 and 1912 of Roses and Shrubs.

M. Leenders & Co., Steil, Tegelen, Holland. Catalogue of Roses.

James Smith Scotland Nurseries. Tansley Near Matlock, Derbyshire, England. Trade list of nursery stock.

Morrisville Nursery, Morrisville, Pa. Price list of Deciduous Trees and Shrubbery.

W. N. Scarff, New Carlisle, Ohio. Semi-Annual Surplus list of Choice New and Standard Bush Fruits.

J. H. Skinner & Co., Topeka, Kans. Wholesale price list.

Arthur Charlton & Son, Eridge Road, Tunbridge Wells, Kent, England. Special cheap offer to the trade only of Herbaceous and Alpine plants.

Rielly Bros. Nurseries, Dansville, N. Y. Surplus list.

Gustav Schott, Aschaffenburg, Bavaria, the large grower and exporter of natural Grass Seeds, is now represented by McHutchison & Co., 17 Murray St., New York, who can furnish all information re prices, samples.

Cedar Hill Nursery Co., Winchester, Tenn. Wholesale price list.

M. H. Reed & Co., Wholesalers of Texas pecans, Austin, Texas.

E. Turbat & Co., 49 Route d'Olivet, Orleans, France. Wholesale list of Roses and Nursery Stock.

F. Delauney, Angers, France. Wholesale catalogue and price list of fruit tree stocks of every description, young plants for Nurseries and Woods, Roses and Rose Stocks, Shrubs, etc.

Hemeray Aubert, Orleans, France. Catalogue and Price List for Fall, 1911, and Spring, 1912.

Klehm's Nurseries, Arlington Heights, Ills. Surplus list.

Sluis & Groot, Enkhuizen, Holland. Advance Price List.

W. Fromow & Sons, Windlesham, Surrey, England. Wholesale catalogue of hybrid named Rhododendrons, etc.

Thos. Meehan & Sons, Dresher, Pa. Fall trade list.

Walter Chas. Slocock, Woking, England. Wholesale catalogue.

J. K. Henby & Son, Greenfield, Ind. Winter Wholesale Price List Fruit Tree Stocks, Grafts, Scions, Forest Tree Seedlings, Nurserymen's Supplies.

M. Leenders & Co., Steil Tegelen, Holland. New Roses for 1912.

Thos. Matheson, Nursery & Seedsman, Morpeth, England. Special Trade Offer.

Henry Farnsworth Moor Bank, Matlock Bank, Derbyshire, England. "Rhododendrons."

Devon Rosery & Fruit Farm, Ltd., Devon Rosery, Toquay, England. Special Offer of Roses, Vines, etc.

Thompson & Morgan, Seedsmen and Hardy Plant Specialists, Ipswich, England. Special Trade List of Hardy Herbaceous & Alpine Plants.

Howdens' Inverness, England. Special Wholesale Offer.

Gust. Ludeman, Halstenbek, Germany. Special Trade Offer.

Benj. Reid & Co., Aberdeen, England. Special offer to the trade.

Stuart Low & Co., Bush Hill Park, Enfield, England. Advance and early offer of Roses and Fruit Trees.

H. M. Hardyzer, Wholesale Grower and Exporter, Boskoop, Holland. Wholesale catalogue of Rhododendrons, Roses, Boxwood, Azaleas, Peonies, Clematis, Hardy and Forcing Plants and Shrubs.

The Conard & Jones Co., West Grove, Pa. "The Best Roses for America."

S. D. Woodruff & Sons, Dey St., New York City. Trade price list of seeds.

DeGraaff Bros., Ltd. Wholesale Bulb Growers and Nurserymen, Leiden, Holland. Wholesale catalogue of Bulbs and Plants.

Willis Nurseries, Ottawa, Kans. Trade list of nursery stock.

Meyer & Son, Bridgeville, Del. Surplus list of Peach 1 yr from bud.

Southern Nursery Co., Winchester, Tenn. Surplus list of Apple, Cherry, Plum, Poplars, and Peach.

Luther Burbank, Santa Rosa, Cal. "Twentieth Century Fruits."

J. C. Hale Nursery Co., Winchester, Tenn. Wholesale price list and Surplus List.

Koolbergen & Sliedrecht, Nurserymen, Boskoop, Holland. Wholesale catalogue, 1912-13.

The Jewell Nursery Co., Lake City, Minn. Trade list and prices on surplus stock. Cover design rather unique, showing in color panorama of the Jewell Nurseries, 1500 acres at Lake City, Minn.

E. W. Townsend, Salisbury, Md. Wholesale Price List of Thoroughbred Plants. Also Catalogue.

Armstrong Nurseries, Ontario, Cal. Illustrated general catalogue, "The California Garden Guide."

Henry A. Dreer, Philadelphia, Pa. Winter Edition of Wholesale Price List of Seeds, Plants and Bulbs.

C. R. Burr & Co., Manchester, Conn. Special Wholesale List.

Fritsch & Becker, Seed Merchants, Grosstabarz, Germany. Special trade list of Conifer and other large tree seeds.

Arthur Boddington, W. 14th St., New York City. Florists' Catalogue of Seeds and Bulbs for Forcing and Planting.

Huntsville Wholesale Nurseries, Huntsville, Ala. January Bulletin.

W. F. Allen, Salisbury, Md. 1912 Catalogue of Choice Strawberry Plants and other small fruits.

W. N. Scarff, New Carlisle, Ohio. Catalogue of fruit and farm seeds.

Peter Henderson & Co., Cortlandt St., New York City. "Everything for the Garden."

Glen Moore Nursery, Zanesville, Ohio. Retail price list.

Youngers & Co., Geneva, Neb. Bulletin No. 1.

Sluis & Groot, Enkhuizen, Holland. General Price List of Vegetable, Flower and Agricultural Seeds.

Perth Amboy Chemical Works, 100 William St., New York City. "Proper Uses" of Formaldehyde.

J. A. Bauer, Judsonia, Ark. "How to Grow Strawberries."

John Lewis Childs, Flowerfield, L. I., N. Y. Price list of choice Gladioli and other Summer Flowering Bulbs and Plants.

Chase Bros. Co., Rochester, N. Y. Bulletin No. 1 Wholesale Price List for Spring 1912.

We are in receipt of an attractive catalogue entitled "Chase Trees for Irrigated Sections" from Herbert Chase of Delta, Colo. He says: "You're busy, or should be. I've troubles, too, and must save time. As a help I cut out surplus words and mean what I say. I've been more than two years preparing this booklet. There is not an idle word in it. I expect you to read and believe every word."

Wm. Ilgenfritz and wife, of Monroe, Mich., stopped over in Rochester to visit their friends, on their way home from New York City.

The Dexter Yarn Co., of Pawtucket, R. I., who carried a half-page adv. in the January number are pleased to inform the trade, that they are in a better position than ever to meet their various requirements.

Red Raspberry Plants, Currant Cuttings

50,000 Marlboro Red Raspberry Plants, No. 1 Stock
10,000 Cuthbert Red Raspberry Plants, No. 1 Stock
25,000 Marlboro, 2,000 Cuthbert Raspberry Plants, for Mail
Order Trade or Lining Out in Nursery Rows
25,000 CHERRY, 5,000 Fays Pro. CURRANT CUTTINGS, No. 1.
1. The above stock is all in Storage, prompt shipment.

L. M. Empie, Highland Nurseries, Johnstown, N. Y.

LOMBARDY and CAROLINA POPLARS

Fine trees, 6 to 15 feet, ½ in. to 3 in. Cal.
CALIFORNIA PRIVET, 2 yrs., 2, 3 and 4 ft., well branched.
CALIFORNIA PRIVET, 3 to 6 ft., sheared globe shape and pyramidal and single stem.
BERBERIS THUNBERGII, 6 in. to 1, 2 and 2½ ft., transplanted bushy and 1-yr. plants.
Four varieties Raspberry Plants, Erie Blackberry, etc.
JOSIAH A. ROBERTS, Malvern, Pa.

APPLE TREES! APPLE SEEDLINGS!!

We offer 50,000 Apple Seedlings, No. 1; 100,000 Apple Trees, 1-yr., such as Stayman, Jonathan, Grimes Golden, Gano, M. B. Twigg, Albemarle or Newtown Pippin. Prices on application.

The Mountain View Nursery Co.
Williamsport, Md.

JUNE BUDS CHEAP

We have unsold, Jan. 20th, Elberta, 900 4 to 5 ft., 12,300 3 to 4 ft., 11,100 2 to 3 ft., 550 18 to 24 in., Carman, 500 4 to 5 ft., that we will sell much cheaper at closing out price than you can buy anywhere. This stock true to name, clean roots, well dug, and first class in every way.

UPSON NURSERIES, Yatesville, Ga.

WANTED

Nursery foreman. Good all-around man. One familiar with evergreens and hardy shrubs preferred. Give age, experience and salary expected.

Address "P", care of NATIONAL NURSERYMAN.

WANTED experienced man in the retail nursery business, to accept position as sales manager for an established house located in a city of 100,000 in Middle West. Good opening with bright future for right man. Sales now run \$75,000 to \$100,000 per year which should be increased. Address "H.", care of NATIONAL NURSERYMAN.

WANTED

Man as correspondent in retail nursery office. State experience, salary, etc.

Address "A", care of this paper.

WANTED--FOREMAN. Common everyday working man with experience growing orchard and nursery stock. Only practical working men need apply. House to live in, and \$60 per month during winter, \$70 per month during summer months. Address, IDAHO STATE NURSERY, H. G. Monce, Proprietor, Nampa, Idaho.

Olympic Nature Nursery THE FOREST CONSERVATORY

WILD FRUITS, PLANTS AND FLOWERS.

Blueberries, Blackberries, Raspberries, Salmonberries, Salalberries, Oregon Grapes, Rhododendrons, Ferns, Spireas, Trilliums, Evergreens and other native plants. Collected fresh from the forest. For sale or exchange. Catalogue on request.

JOEL SHOMAKER, Nellita, Washington

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A complete alphabetical list of all American cities, with the names and addresses of all commercial horticulturists therein. A separate list, arranged alphabetically, of every commercial horticulturist in this country. These lists are keyed to indicate the special line or lines of each establishment. The book also contains special lists, as follows:

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2,000 Early Harvest	5,000 Eldorado	8,000 Ohmer
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W. B. COLE, Painesville, O.

MAKE ME AN OFFER on carload California Privet, well branched, 24 to 36 in., 36 to 48 in. We also grow Upright Iboya Privet in quantities.

GEO. F. VERHALEN,
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Wants your SURPLUS lists and lists of LINING OUT STOCK.

SURPLUS for spring in 2-year CHERRY, leading varieties, sweet and sour. If interested, write

R. F. D. 2. J. E. McLANE, Dansville, N. Y.

WANTED Apple 1 and 2 years. Cherry 1 and 2 years. Peach June Bud and 1 yr. Climbing Roses, Ornamental Stock.

INTERNATIONAL NURSERY CO., Denver, Colo.

APPLE, PEAR, PLUM, CHERRY SEEDLING STOCKS AND ROSA CANINA

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We are now booking, at special quotations, contract orders for 1912-13 delivery. Contract orders are open until February 15, 1912. Get our prices, they are reasonable.

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We still have a few apple seedlings on hand of 5-7 mm, 7-10 mm, and 7-12 mm. GET OUR SAMPLES.

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OLD TRIED
NEW TRUE

Booking orders for
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225 Varieties

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A SOUTHWESTERN DIRECTORY of the Nurserymen and Florists of Texas and Oklahoma. Over five hundred names and addresses revised in 1911.

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JNO. S. KERR, Secretary, Sherman, Texas

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We have an opportunity for a "live wire" with \$3000.00 to invest in the capital stock of an incorporated nursery in North Dakota and take a position as sales manager. Will pay a salary in proportion to results. Don't waste stamps unless you mean business. We will stand any inspection. Address "Investment," care of NATIONAL NURSERYMAN.

APPLE SEEDLINGS

A few thousand extra size Vermont grown seedlings—from native seed. Prices right.

F. H. McFARLAND, Lamoyille Co., Hyde Park, Vermont

Strawberry Plants

I have millions of them. Wholesale price list free. Thirty-two years growing good plants.

J. A. BAUER, Judsonia, Ark., Box 9

"Helen Davis" Strawberry plants for sale by the "ORIGINATOR." This new variety out yielded all varieties tested at the Ohio and Ind. experiment stations. This is not the same variety that H. W. Buckbee sent out. Send for prices to the ORIGINATOR.

GEO. W. DAVIS, R. R. No. 7, Box 53. Brazil Ind.

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WARD-DICKEY STEEL COMPANY

Manufacturers of Planished Sheet Steel

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Fall Bearing Strawberries

These Berries are truly wonderful. They bear fruit every fall as well as spring, three crops in two years. They have yielded as high as 10,000 qts. to acre in Aug., Sept. and Oct. of first year, with us. We cannot get enough fruit to supply the demand at 25c per qt. wholesale. I know of nothing in the fruit line quite so profitable. We are also headquarters for Plum Farmer, Idaho and Royal Purple Raspberries, Early Ozark Strawberry, Watt Blackberry, Hastings Potato. Catalogue of all kinds of Berry Plants free. Address

L. J. FARMER, Box 283, Pulaski, N. Y.

Berry Plants and Root Cuttings AT HALF PRICE

No. 1 stock, all varieties. Also a few English Beagle Hounds, cheap.

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A. Hamilton & Sons, Bangor, Mich., offer the following apple scions: Baldwin, R. I. Greening, Maidens Blush, Grimes Golden, Stark, Northern Spy, Steele's Red, American Golden Russett, Wagner and Fallawater, cut from bearing trees of superior types. Scions run 15 to 30 inches long.

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We have in surplus several hundred thousand RED OAK seedlings, 6 to 12 inches and 12 to 18 inches for fall or spring shipment. Let us quote you prices and send samples.

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Evergreen Specialists

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GRAPE VINES

We offer for Fall and Spring delivery the largest and most complete stock of GRAPE VINES in strong grades for nurserymen and dealer's trade.

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ESTABLISHED 1866

W. T. HOOD & CO.

OLD DOMINION NURSERIES

GROWERS OF

High Grade Nursery Stock RICHMOND, VA.

Offer for Spring 1912: Peach, Pear and Cherry, 1 and 2 year; Pear Seedling. Also California Privet, 1 and 2 yr.; extra fine. Send us your lists for quotations.

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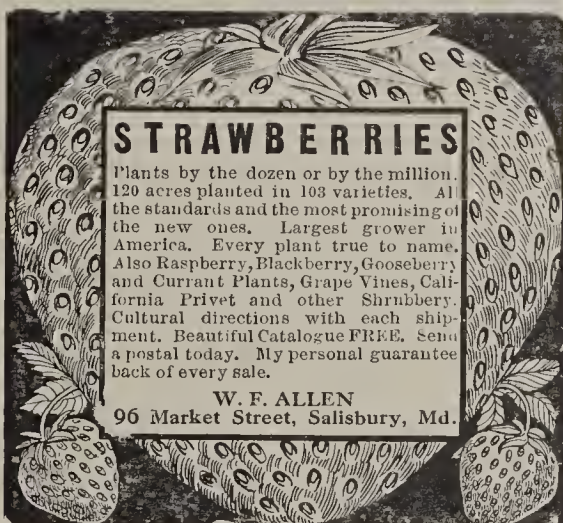
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SPECIALISTS IN
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Prompt Deliveries Our Specialty

WOOD TREE AND POT LABELS

Iron or copper wired, printed, painted and plain. Everything made of wood for nurserymen or florists. No order too large or too small for prompt execution.

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Mathiesens, Planteskole

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FRUIT TREES in standards, half standards, pyramids, bushes and dwarf-trained trees

ROSES in standards and dwarfs.

Ornamental Trees and Shrubs, etc.

TRADE LIST FREE ON APPLICATION

Export to oversea places

GOLD MEDAL ST. PETERSBURG, 1899,
and CHRISTIANIA, 1907

Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

HIGH
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LARGE
VARIETY

Correspondence solicited. Price list upon request.

W. B. WHITTIER & CO.
South Framingham, Mass.

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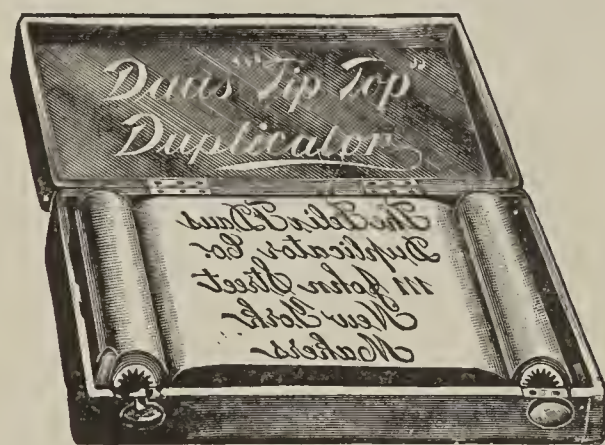
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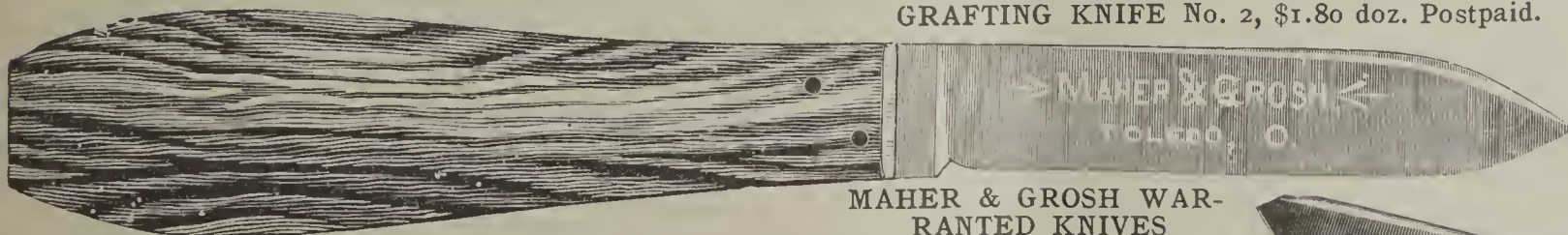
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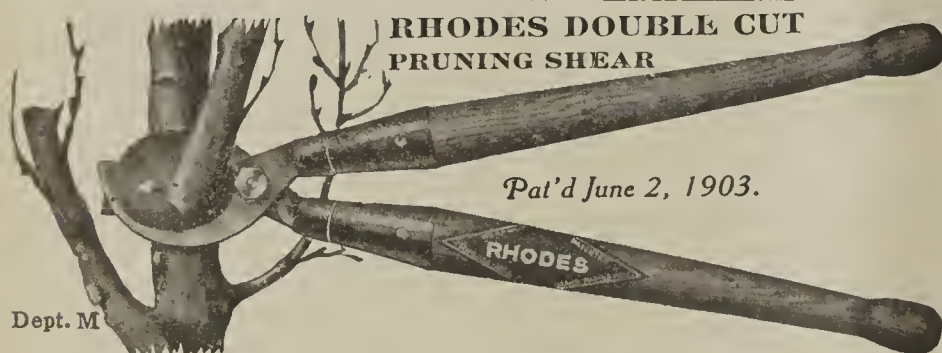
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JACKSONVILLE, FLORIDA

Let Me Tell You Just Why Our Trees and Plants are So Mighty Good—Orlando Harrison

You can't cut through a piece of lead as quick as through a piece of cheese—for the same reason, trees and plants grow fastest where their roots can spread and develop the easiest.

That's the great beauty of trees and plants we grow here; it's enough to make you happy just to look at their roots. And when the roots are all right, it's pretty safe to bank on the top, as being all right, too!

Take our Strawberry Plants, for instance. Our soil is so light and loose, you can lift them right out with a bunch of roots as big as your hand—all the roots come out, instead of breaking off the fibrous ones as in clay soil. Our plants grow rapidly—sturdy, healthy fellows that you'll be proud to sell your customers.

Ours are in fine shape now, when those grown in many other places are failures. That's because of our long growing season; we had a drought here last summer, too, but after the September rains the plants kept right on growing instead of shutting down for the winter; and now we've got some *real quality* to offer you.

We've got a fine lot of strawberry plants—ask us about them—but the causes that make *them* fine make our *other things* mighty successful, too. Here's a partial list of what we have to offer this month, and there are lots more. Full particulars, with prices to the trade, on request. Get in line with us now! **WE ALSO HAVE A SPLENDID ASSORTMENT OF CALIFORNIA PRIVET, ELBERTA PEACH, ONE- AND TWO-YEAR APPLE, EARLY RICHMOND CHERRY, ETC.**



Corner of a field of our two-year-old Privet plants. So rank and sturdy they will make a 3- or 4-foot hedge at once.

FOR SALE JANUARY 25, 1912

PEACH	6-7 $\frac{3}{4}$	5-6 $\frac{1}{2}$	4-5 $\frac{1}{2}$	3-4	2-3	1-2
Elberta	10,000	40,000	50,000	75,000	50,000	50,000
Apex				500	100	
Bilyeu's Late	470	1,700	200			
Bray's R. R.	40	320	60	200	120	60
Belle Ga.	1,500	3,500		200	400	500
Beers' Smock	650	1,400				
Carman	5,500	13,000	4,700	800	1,000	1,000
Champion	300	2,000	1,810	400	630	
Chair's Choice		360	300	100		
Crawford's Late	1,100	4,000	1,350	3,400	2,500	2,000
Crawford's Early		1,370	250			
Capt. Ede		30	200	300	250	500
Connette	60	350	10	280	280	190
Emma		450				
Denton		200	200	200	200	
Eureka	200	200	100	100		
Engle's	80	470	260	400	380	200
Early Mich	50	50	50			
Foster	300	300	200	100		
Fox Seedling	300	5,000	1,900		1,200	1,000
Fitzgerald	90	250	130	240	170	180
Ford's Late		180	280	580	340	240
Francis	60	350				100
Globe	130	160	40			400
Greensboro	980	3,000	1,700	1,700	1,000	1,000
Gold Mine		50	50	50	50	
Geary's Hold-On	250	1,500			200	250
Heiley	20	50	50	50	20	30
Harrison C.	30	340	380	630	250	330
Kalamazoo		300	300	200	100K	
Krummels	200	830	370	1,650	1,300	300
Levy's Late	120	740	420	660	320	130
Mayflower	1,000	1,500	1,000		800	
Mamie Ross	500	2,100	1,540	1,400		650
Mt. Rose	1,000	1,300		580	1,700	800
Moore's Favorite	1,500	3,000	1,500	850	900	1,000
McCallister		250	200	400	700	600
Marshall	20		30	10		
Niagara		200	200	200	200	200
New Prolific		500	500	400	300	100
O. M. Free	800		500		50	50
Picquet's	190	130		30		
Prize	20	310	200	260	180	90
Reeve's Favorite		50	50	50		
Ray	2,800	5,800				
Stump	1,040	5,670	5,460	5,550	5,800	5,000
Slappy		1,590	1,290	1,800	1,200	1,000
Stephen's Rareripe	230	670	570	340	990	800
Salway	500	5,400	2,240	2,000	1,820	400
Triumph	20	70		150	80	40
W. H. Cling	220	1,800				400
Waddell	10	560	710	1,210	1,170	980

PEACH	6-7 $\frac{3}{4}$	5-6 $\frac{1}{2}$	4-5 $\frac{1}{2}$	3-4	2-3	1-2
Wonderful	50	1,300				420
Yellow St. John		770	370	920	690	340
Ethel's Mammoth		50	50	50		
Sneed		100	100	100	100	
Wilkins Cling	80	360			120	100
APPLES	1 in.	6-7 $\frac{3}{4}$	5-6 $\frac{1}{2}$	4-5 $\frac{1}{2}$	3-4	2-3
Bismarck			50			
Benoni		250	200			
Coffelt Beauty		400	100			
Cooper's Mk		500	100			
Ben Davis	500	2,000				
C. R. June		400	300			
Carthouse		200	100			
Dominie		200	100			
E. Harvest		2,000				
Early Strawberry		100	100			
Ensee		300	300			
Fourth July		800	200			
Fannie		300	100			
Ingram		200	100			
Jeffries		300	200			
Kinnards		500	100			
Lankford		100				
Late Raspberry		300	300			
Lawver		600	100			
Longfield		300	100			
M. B. Twig		4,500	620			
Mann		400	150			
Missouri Pippin		600	500			
Myrick		800	100			
N. W. Greening		450	390			
P. W. Sweet		1,200	1,100			
Payne's Late Keeper		500	200			
Pewaukee		350	100			
Red Astrachan		700	500			
Rawle's Janet		300	200			
Rolfe		200	200			
Springdale		500	100			
Salome		300	300			
Spitzenberg		500	500			
Senator		100	100			
Smith's Cider		200	100			
Strawberry (Chenango)		150	50			
Scott's Winter		400	100			
Sweet Bough		50	50			
Walbridge		300	100			
Winesap		4,000	4,000			
Yellow Transparent		3,000	1,000	5,000	5,000	
Yellow Belleflower		600	700			
York Imperial			10,000	10,000	10,000	5,000

Harrison's Nurseries
J. G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

W. F. HUMPHREY, PRINTER, GENEVA, N. Y.

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THE NATIONAL NURSERYMAN



MARCH, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SPIRAEA VAN HOUTTEI
by the thousand.

Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

Complete line General Nursery Stock for whole-
sale trade. Unsurpassed storage facilities.

Large stock in storage, free from winter injury.

APPLE, CHERRY, PEACH, BARTLETT and B. deANJOU
PEAR, BLACKBERRIES, root cutting plants, CURRANTS,
GRAPE VINES, CAROLINA POPLAR, ELM, SILVER
MAPLE, CALIFORNIA PRIVET.
ROSES. APPLE GRAFTS. APPLE SEEDLINGS.

ASK FOR SPRING TRADE LIST

1,000,000 POPLAR

Norway and Carolina

We offer this year the largest stock of northern-grown
Poplar, Box Elder, Soft Maple and other hardy shelter
belt stock to be found in the country.

A fine stock of **ONE-YEAR APPLE**, said to be one
of the best stands in the country this year, McIntosh,
Jonathan, Rome Beauty, etc., etc.

Write us for prices on carload lots.

The Jewell Nursery Co.

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

BAY TREES

APRIL--MAY SHIPMENT

Direct importations from Belgium

STANDARDS, PYRAMIDS, COLUMNS, HALF
STANDARDS, HIGH STEMS, BUSHES,
IMPERIAL SHAPE, Etc., Etc.

For landscape work, summer decorations and formal garden-
ing **Bay Trees** are indispensable. They are shipped in tubs—
all ready for use.

We offer you the best Trees that Belgium produces and sell
them at Belgium prices, or F. O. B. New York if you prefer.

Our Booklet "Just Bays" illustrates all the sizes and
shapes we offer. *Send for it.*

WRITE FOR SPECIAL QUOTATIONS

McHUTCHISON & CO., THE IMPORT
HOUSE

17 Murray Street, New York City



STANDARD.



PYRAMID.

J. H. SKINNER & CO.

CAPITAL NURSERIES

Station "A"

TOPEKA, KANSAS

APPLE SEEDLINGS

We offer you apple seedlings No. 1 grade, both
straight and branched roots, suitable for graft-
ing or budding. These apple seedlings were grown on land never before used for nursery
purposes, and were well matured before digging. They are strictly first-class in quality.

APPLE GRAFTS

No. 1 piece root. Good list of varieties. We are
prepared to make whole root grafts of both apple
and Kieffer pear if wanted. Send for samples and prices.

JAPAN PEAR SEEDLINGS

No. 1 grade, strong,
healthy plants.

SHADE TREES

Ash, Maple, Elm, Carolina Poplar, Volga Poplar, Tulip
Poplar, Honey Locust, Persimmon, American Sweet
Chestnut, Red Bud, and White and Black Walnut. We also offer Apple, 1 and 2 years,
Cherry, Peach, Kieffer and Garber Pear, Catalpa Bungeii, and Flowering Shrubs.

NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the
United States at the

Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and
Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms
and other tender Greenhouse Plants

Have a large stock stored in frost proof cellars that can be shipped at any time desired;
switch from N. Y. C. lines direct into our packing house; can load without exposure.
Unsurpassed facilities for handling orders large or small. Catalogs and price lists free.

A few specials while they last:

STANDARD PEARS in assortment DUCHESSE DWARF PEARS BOURGEAT QUINCE
PRUNUS PISSARDI and TRILOBA CUTHBERT AND OTHER RASPBERRIES
CONCORD AND OTHER GRAPES



HORSE CHESTNUT

Our Specialties are: Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

AMERICAN

ELMS...

SPLENDID TREES

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

ANNOUNCEMENT

January Bulletin has been mailed to the trade. Those entitled to receive a copy should insist on having one. It will be mailed cheerfully and promptly on receipt of request. The Bulletin shows what we have to sell this Spring and includes some attractive offers of STANDARD and DWARF APPLES, QUINCES, PEACHES and other fruit trees: small fruits and a fine lot of ornamentals like TREE HYDRANGEAS, TREE LILACS and other flowering shrubs in standard form: ROSES—our long suit—including some especially fine Crimson Rambler, Baby Rambler, Blue Rambler, White Dorothy Perkins, H.Ts, H.Ps—in short lots of good things. Also APPLE SEEDLINGS, in all grades, and FRENCH and VERMONT APPLE SEED. This is quite a lot of talk to put into so small an amount of space, but we have lots of things to talk about. Buyers are invited to tell us their wants and we will talk to the point with attractive prices on the goods known very generally as "THE PREFERRED STOCK."

JACKSON & PERKINS COMPANY

"Purveyors to the Trade"

NEWARK, Wayne Co., NEW YORK

February 1st

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's worth it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.

INCORPORATED

Fruitland Nurseries

AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.

CONIFERS
BROAD-LEAVED
EVERGREENS
DECIDUOUS
SHRUBS
WEEPING
MULBERRY
PEACHES
OTHER FRUITS



Biota Japonica Filiformis.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

Buy Hill's Evergreens and Get Best Selections

YOUR standing with your customers depends on the kind of stock you supply them. If it's evergreens, you doubtless have to *buy*—very few general nurserymen can command the facilities necessary to grow evergreens right.

It's doubly important, then, that you get your stock from growers whom you *know* you can depend on—whose product you can recommend to your trade as confidently as though you had grown it yourself.

We have the facilities, the men, and the skill necessary to grow *evergreens right*—and you can depend on what we tell you as gospel fact. We are evergreen specialists—have been pushing that line for over 50 years, and are now growing *millions of evergreens* annually. No other American grower can offer nearly such a complete stock.

You will be particularly interested in our

Seedlings and Transplants for Nurserymen's and Dealers' Trade, Lining Out, Etc.

Our Wholesale Catalog for 1912 is ready. If *your* copy has not arrived, ask us for it now. Interesting facts and illustrations—and our prices are right.

D. Hill Nursery Company, Inc.
EVERGREEN SPECIALISTS D. HILL, President

Largest Growers in America; Founded 1855

Box 401, Dundee, Ill.

Deciduous Forest Tree Seedlings Grown In Immense Quantities

LARGE SURPLUS

APPLE

GRIMES GOLDEN
INDIAN
JONATHAN
M. BLUSH
N. W. GREENING
PEWAUKEE
RAMBO
ROME BEAUTY
STARK
STAYMEN'S W. S.
TULPEHOCKEN
WINESAP
YORK IMPERIAL

PEACH

CARMAN
CHAMPION
EARLY CRAWFORD
LATE CRAWFORD
O. M. FREE

PLUM

BURBANK
ABUNDANCE
MOORE'S ARCTIC
REINE CLAUDE
SHIPPER'S PRIDE

CHERRY TREES

FOR SALE IN CARLOAD LOTS

MONTMORENCY
BALDWIN

E. RICHMOND
DYE HOUSE

ENG. MORELLO

APPLE SEEDLINGS
STRAIGHT ROOTS

$\frac{3}{16}$ -in. up.
Price very reasonable

C. M. HOBBS & SONS
BRIDGEPORT, : : INDIANA

Jonathan

Gano

Ben Davis

AND OTHER LEADING SORTS IN CARLOAD.

Fine assortment of Apple in 2-year Grafts and 1-year Buds.

CHERRY, 1 inch up; $\frac{3}{4}$ to 1 inch; $\frac{5}{8}$ to $\frac{3}{4}$,
and all under grades.

KIEFFER-GARBER, and assorted pear in
all grades.

A carload of $\frac{3}{4}$ foot, 2-year, California Privet at
a bargain. This is a fine lot.

TEXAS UMBRELLA TREE--

CATALPA SPECIOSA,

in large quantity, 4 to 6, 6 to 8, 8 to 10.

If you don't receive our January Surplus List
ask for it.

WAXAHACHIE NURSERY CO.

J. R. MAYHEW, President

WAXAHACHIE, TEXAS

Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries

Huntsville, Ala.
JESSIE S. MOSS, Prop.

We offer for Spring of 1912 in large quantities as usual:

SPECIALTIES

APPLES—Commercial varieties, one year, in large supply. As fine in quality as ever grown.

PEARS—Kieffers, one and two years old. A much smaller crop than heretofore.

CHERRIES—On Mazzard. One year. Bing, Lambert, Napoleon, Black Tartarian.

CHERRIES—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

ROSES—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

PRIVET—Amoor River. Retains its foliage longer and holds its color better than California Privet.

MAGNOLIA G. F.—Huntsville grown. Handsome, young plants, transplanted.

See Price List for particulars.

Address, T. J. O'HARA, Manager,
HUNTSVILLE, ALA.

Have you seen and examined the quality and finish of our

Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

SMALL STOCK

FOR PLANTING
IN NURSERY ROWS

We have a large assortment of this stock to offer this year. It is all first class stock that will give the best results to the planter. Our list, showing varieties and prices has just been issued. Send for a copy at once. It will interest you.

We can also offer French Crab Apples, Kieffer Pear, Mahaleb Cherry and Quince Seeds and a complete list of Tree and Shrub Seeds. A limited supply of Apple, Pear, Cherry, Plum and Quince Seedlings remaining. Send for lists and prices.

THOMAS MEEHAN & SONS

Wholesale Nurserymen and Tree Seedsmen

DRESHER (near Philadelphia) PA.

BOBBINK & ATKINS

WORLD'S CHOICEST NURSERY PRODUCTS

ROSES, in all kinds and varieties

PALMS and BAY TREES by the thousands

EVERGREENS and CONIFERS, in several hundred kinds and varieties

Pot-grown FORCING PLANTS, Autumn Delivery

RHODODENDRONS, Hardy, ENGLISH HYBRIDS, Maximum and Catawbiense

FRUIT-TREES, home-grown, imported, DWARF and TRAINED

BOXWOOD, in all shapes, forms and sizes

SMALL FRUIT, in all kinds and varieties

HARDY AZALEAS, in all varieties and colors

NUT TREES, profitable kinds

FLOWERING SHRUBS, in bush and standard forms in hundreds of kinds and varieties

OLD-FASHIONED, Hardy FLOWERING PLANTS, in thousands of kinds and varieties

JAPANESE MAPLE, in all colors and varieties

PAEONIAS, IRIS, PHLOX FERNS,

SHADE TREES, in hundreds of useful and attractive varieties

HARDY GRASS

MAGNOLIAS and other FLOWERING TREES

KITCHEN HERBS and ROOTS

WEeping and STANDARD TREES, in many varieties

RUTHERFORD PARK LAWN GRASS SEED

HEDGE PLANTS, in all popular kinds

AUTUMN BULBS, Dutch, French and Japanese kinds

HARDY TRAILING VINES and CLIMBERS

Interior and Exterior DECORATIVE PLANTS, in large variety

HARDY VINES and CLIMBERS in pots

VISITORS to our nurseries are always welcome

SPRING and SUMMER FLOWERING BULBS, ROOTS and PLANTS

ASK FOR WHOLESALE CATALOG

Nurserymen, Florists and Planters
RUTHERFORD, N. J.

OUR SLOGAN :
Plant for Profit—

Berberis Thunbergii Seedlings
Large Stock
Fine Grade
For Immediate Shipment

C. R. Burr & Company
Manchester, Conn.

If you want a fine stock of Standard
APPLE, PEAR, CHERRY AND PEACHES
ALSO ROSES

write for our wholesale price list

=====

We have an extra fine stock of

HYDRANGEAS
PANICULATA
GRANDIFLORA

Charlton Nursery Co.
Importers and Growers
ROCHESTER, N. Y.

FOREST TREES
FRUIT STOCKS

Shipments of over 200 Million of
Trees Annually

♦ ♦

J. HEINS' SONS

HALSTENBEK, No. 152

Near Hamburg, Germany

Largest Forest Tree Nurseries in Europe.

Please write for Catalogue and Forest
Planter's Guide to our American Agent:

OTTO HEINECKEN

287 Broadway
NEW YORK CITY

EVERGREEN
SEEDLINGS

FOR SPRING SHIPMENT we offer a
large stock of all leading varieties, grown
in soil to develop extra stocky, well rooted
seedlings. Orders filled with plants dug fresh
and shipped the same day. : : : : :
Spring price list now ready.

R. DOUGLAS' SONS

ESTABLISHED 1848

Waukegan Nurseries

Waukegan, Ills.

English Nursery Stock

Extensive stock of *RHODODENDRONS*, English grown, hardy kinds a specialty. *These are specially grown for America.* Bushy, well-grown plants, budded, 1½ to 2 ft., 2 to 2½ ft., and a few kinds 2½ to 3 ft. *ANDROMEDA, AZALEA, KALMIAS, etc.*, a good stock. *HARDY CONIFERS*, a large stock. Low prices can be quoted on all Conifers. *ORNAMENTAL EVERGREEN TREES, FRUIT TREES*, trained and in pots. *TRANSPLANTED FOREST TREES, FRUIT TREE STOCKS, etc.*

The stock is in excellent condition. *First grade stock only supplied.* Thirty years successful trading in the States. No agents. Write direct for wholesale catalogue.

Walter Charles Slocock Goldsworth Nursery

Half an hour's rail from London by
L. & S. W. Ry., Main Southampton Line.

WOKING
Surrey, Eng.

Another New Edition of Our 80-page Descriptive Catalogue

is now ready for delivery. We have added all the new things worthy of mention and omitted some of the old varieties that are no longer sold.

Rochester Lithographing Co.
22 ELIZABETH STREET
ROCHESTER, N. Y.

COLORED PLATES AND PLATE BOOKS

CABLE ADDRESS: NOVA BOSKOOP—A B C Code 5th Ed.

BOSKOOP, Jan. 26th, 1912.
Holland

Gentlemen:—Herewith beg to state that I have dissolved my partnership with

Messrs. W. VAN KLEEF & SONS

The Nurseries, Boskoop, Holland

and that I will continue the business relations for my own account from Jan. 27, 1912, under the name of

VERKADE VAN KLEEF

(W. VAN KLEEF, Jr., Prop.)

"NOVA NURSERIES"

BOSKOOP,
HOLLAND.

Hoping to be honored with your esteemed orders which will have my personal best care and attention.

Yours very truly,

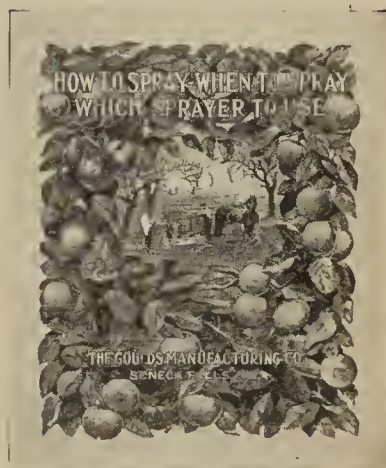
W. VAN KLEEF, Jr.

NURSERIES:

Boskoop,
Waddinxveen, (Holland).

SPECIALTIES: Azalea, Buxus, Clematis, Conifers, Japanese Maples, Magnolias, Rhododendrons, select hardy varieties; Roses, new and old varieties, etc., etc.

Send For A Free Copy of This Spray Book



It illustrates and describes every type and capacity of spray pump in general use, from the smallest hand sprayer to the largest power sprayer for orchards of several thousand trees.

It also contains a valuable calendar which tells what to spray, when to

spray and how to prepare the various mixtures.

Write or drop us a postal to-day before the edition is exhausted.

THE GOULDS MFG. CO.
LARGEST MFR. OF PUMPS FOR EVERY SERVICE

137 West Fall Street,
SENECA FALLS, N. Y.



American Forestry Company

Theodore F. Borst, Forest Engineer

South Framingham, Mass

“Little-Tree Efficiency”

Business-Bringing Facts

For Money-Making Nurserymen

YOU'RE after more money.—That's right, because it's business.—But you're bound to suit the customer, for lasting profit and permanent trade depend upon the mutual satisfaction of both yourself and him.

The trade worth while is the trade that holds, with to-day's sale helping the sale of to-morrow.

We want to coöperate with you for more and better business, not because we are philanthropists, but because the more you make the more we make.—Let's combine our experiences for more money-making for both of us.

Science and sense have discovered an immutable law,—that seed origin is the basis of all successful result.—To thrive and be hardy in any climate and soil, it is absolutely essential that a tree be germinated from seed produced in a similar climate and soil.

Improper seed results in stock whose growing season does not intimately correspond with that of the locality where it is planted,—unacclimated stock, likely to grow out of season, to be injured by late frosts in spring and early frosts in fall, and to die in open winter.

You're in America, selling to Americans, trees which are to be planted in American soil, to grow or not to grow according to the stock you sell.

These trees, then, should be raised from seed of this or a similar region, grown here, that they may be transferred to you without shock or dangerous delay.

Our seeds are collected from indigenous trees, in selected regions whose product has been tested and proved to be hardy, strong, and vigorous, able to grow in American soil and climate.

Every one of our twenty million little trees is grown at our Little Tree Farms from seed home-planted and home-cared-for, each seed collected by ourselves or by tested experts, in suitable regions, each seed hardy for New England, planted in New England, and grown to hardihood in New England.—When transplanted to your nursery it suffers no radical change and naturally grows to maturity well formed and satisfactory.

You and your customer demand well-grown plants, with straight, stocky, well-formed stems, plenty of fibrous roots, full, vigorous tops.—All spindling, over-stimulated shoots, and dwarfed, stunted growths can't be other than poor quality.

We constantly test our stock that neither you nor we may take chances.— Recently we weighed a thousand plants grown by others, and a thousand of our own of the same species, grade, and height.— Ours weighed five times as much as the others.— Many times we have compared our two-year seedlings with three-year transplants from others, to find ours stockier and larger.— We find, further, that many of our one-year seedlings are better than two-year seedlings from other nurseries.

We not only have the soil, but we have the “know-how,”—the scientific knowledge and practice for producing little-tree efficiency.

We carry nothing in storage, never dig plants in blocks or sections.—When your order is to be shipped, we take the plants from the ground, count, inspect, and grade them under cover, properly pack them, and deliver them to the depots—every one right out of the ground—fresh, **FRESH, FRESH!**

What a difference from European stock!—dug in the fall, stored like cord-wood all winter, from ten days to four weeks on the water, several days or a week or more on the wharf, then shipped to you, some alive, some half dead, some all dead, and all inevitably diminished in vitality.— It can't be otherwise, with thousands of miles of travel, hit-or-miss storage, many handlings, certain delays with accompanying injury, resulting in growth stunted for at least one year, always with a fearful tree mortality, and probably infected with pests and disease.

We sell success as well as trees,—mutual success, three-sided success, yours, your customer's, and ours.

Your reputation and ours are our assets, and the combination stands for more

money for both of us, and satisfied customers.

Will you not ally yourself and your influence with this new movement toward strictly honest and highly scientific production, the increase and improvement of strictly American-grown plants?

Because we plant and grow more forest trees than anybody else in America, we quote you lower prices than you could obtain elsewhere for quality anywhere near approaching ours.— Theoretically you may get a thousand trees from Holland, France, or Germany for a little less first cost, but nature does not permit them to be profitable to you or your customer.

We allow liberal count and running-over measure.— In a bundle of a hundred we place from five to ten extra plants, which means from five to ten thousand additional in every hundred thousand.— Our smaller plants are tied by raffia in bundles of a hundred, which cannot injure the stems, and larger plants are packed twenty-five or fifty, according to size, and tied by willow withes specially grown by us, guaranteeing no injury to the bark of little trees.

In a word, on American soil we produce American plants for American use.— Our stock is grown in our fields, waiting for your order.— It's not stored to save expense and time.— Your order is filled from the field, that you may receive tree health, vigor, and long life.

We give you what you want, when you want it.

Yours for more, better, and
lasting business,

**AMERICAN FORESTRY
COMPANY,**

Theodore F. Borst,
Forest Engineer.

“The Nursery for Nurserymen.”

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., MARCH, 1912

No. 3

GENERAL PLANS FOR ORCHARD SPRAYING

Cornell Bulletin No. 283

I. Dormant season before leaf buds open but just as they are swelling:

- a. Lime-sulfur as a contact spray for
San José scale 32 to 33° Beaumé 1-8.
Blister mite 32 to 33° Beaumé 1-11.

b. Add arsenate of lead, 2 pounds to 50 gallons, to the lime-sulfur as a poison for

Bud-moth
Cigar case-bearer

II. After leaf buds open but before blossoms open, i. e., when just beginning to show some pink. Watch weather and get spray on *before* rain, not after:

a. Lime-sulfur solution, 32° Beaumé 1-40, or Bordeaux 3-4-50, for apple scab (the fungus).

b. Arsenate of lead, 2-3 pounds to 50 gallons, added to lime-sulfur or Bordeaux as a poison for

Bud-moth
Cigar case-bearer
Canker-worm

This application should never be omitted during cold, rainy seasons.

III. After petals have fallen, beginning when about two-thirds have fallen. Have spray on before rains come. This is important.

a. Lime-sulfur, 32° Beaumé 1-40, or Bordeaux, 3-4-50, for

Apple scab
Leaf spot

b. Arsenate of lead, 2-3 lbs. to 50 gallons, used with lime-sulfur or Bordeaux for

Codling-moth
Canker-worm
Bud-moth

This is the most important of all the applications.

IV. Ten days to two weeks later. Before rain period:

a. Lime-sulfur, 32° Beaumé 1-40, or Bordeaux, 3-4-50, for

Apple-scab
Leaf-spot

b. Arsenate of lead, 2-3 lbs. to 50 gallons, used with lime-sulfur or Bordeaux for

Codling-moth
Canker-worm

V. Eight to nine weeks after blossoms fall:

Same as IV for late scab infections and late attacks of

codling-moth. In most seasons this application is not necessary.

If aphid appears, spray before leaves curl with whale-oil soap, 1 lb. to 6 gallons, or kerosene emulsion diluted with six parts of water, or use one of the tobacco extracts.

THE PEACH ORCHARD*

I. Dormant season before the leaf buds begin to swell:

a. If scale is not to be combated, spray with lime-sulfur, 32° Beaumé 1-15, or Bordeaux, 4-4-50, or copper sulfate, 2 lbs. to 50 gallons of water, for

Peach leaf-curl

Any of these will be effective if properly applied. Spray from both directions to coat every bud, being sure to apply before buds have begun to swell at all.

b. Lime-sulfur, 32° Beaumé 1-7 $\frac{3}{4}$, for
San José scale

This will also control peach leaf-curl.

II. About the time the calyces or shucks are shedding from the young fruit:

a. Self-boiled lime-sulfur, 8-8-50, with arsenate of lead, 2 lbs. to 50 gallons, for

Scab
Brown-rot

As this is rather early for the scab and rot the self-boiled lime-sulfur may be omitted, using merely

b. Arsenate of lead, 2 lbs. to 50 gallons of water, for
Curculio

If the self-boiled lime-sulfur is omitted, add to each 50 gallons of water milk of lime made by slaking 2-3 lbs. of good stone lime. This will tend to counteract any caustic action of the arsenate of lead.

III. Two or three weeks later or about one month after petals fall:

a. Self-boiled lime-sulfur, 8-8-50, for
Scab

Brown-rot

b. Add 2 lbs. arsenate of lead for
Curculio

IV. About one month before fruit ripens:

a. Self-boiled lime-sulfur, 8-8-50, for
Brown-rot

b. Omit arsenate of lead.

*Taken from U. S. D. A. Bureau of Entomology Circ. 120:6-7.

THE HOW OF BORDEAUX MIXTURE

Copper sulfate 4 lbs., stone lime or hydrated lime 4 lbs., water 50 gals. Bordeaux is the fungicide most generally used. The strength varies according to the plant to be sprayed. The formula given above is the strength usually recommended. When a different strength is necessary, the formula is given under the disease. Stock mixtures of copper sulfate and lime are desirable. They are prepared in the following manner:

COPPER-SULFATE

Dissolve the required amount of copper sulfate in water in the proportion of one pound to one gallon several hours before the solution is needed; suspend the copper sulfate crystals in a sack near the top of the water. A solution of copper sulfate is heavier than water. As soon, then, as the crystals begin to dissolve the solution will sink, bringing water again in contact with the crystals. In this way, the crystals will dissolve much sooner than if placed in the bottom of the barrel of water. In case large quantities of stock solution are needed, two pounds of copper sulfate may be dissolved in one gallon of water.

LIME

Slake the required amount of lime in a tub or trough. Add the water slowly at first, so that the lime crumbles into a fine powder. If small quantities of lime are used, hot water is preferred. When completely slaked or entirely powdered add more water. When the lime has slaked sufficiently, add water to bring it to a thick milk or to a certain number of gallons. The amount required for each tank of spray mixture can be secured approximately from this stock mixture which should not be allowed to dry out. Hydrated or prepared lime of good quality may be substituted for the stone lime. Place the required amount in the barrel or tank and add water. No slaking is required. Do not use air-slaked lime.

TO MAKE BORDEAUX

Take five gallons of stock solution of copper sulfate for every fifty gallons of Bordeaux required. Pour this into the tank. Add water until the tank is about two-thirds full. From the stock lime mixture add the required amount. Stir the mixture, add water to make 50 gallons. Experiment stations often recommend the diluting of both the copper sulfate solution and the lime mixture to one-half the required amount before pouring together. This is not necessary, and is often impracticable for commercial work. It is preferable to dilute the copper sulfate solution. Never pour together the strong stock mixtures and dilute afterward. Bordeaux mixture of other strengths as recommended is made in the same way, except that the amounts of copper sulfate and lime are varied according to the requirements.

THE FERRO-CYANIDE TEST

It is not necessary to weight the lime in making Bordeaux mixture, for a simple test can be used to determine when enough of a stock lime mixture has been added. Dissolve an ounce of yellow prussiate of potash in a pint of water and

label it "poison." Cut a V-shaped slit in one side of the cork so that the liquid may be poured out in drops. Add the lime mixture to the diluted copper sulfate solution until the ferro-cyanide test solution will not turn brown when dropped from the bottle into the mixture. It is always best to add a slight excess of lime.

THE HOW OF SULPHUR SPRAYS

CONCENTRATED LIME-SULFUR

Concentrated lime-sulfur solutions may be purchased from the manufacturers, of which there are now a large number making a good product, or they may be prepared by the grower himself. The following directions, given by J. P. Stewart, are taken from Pennsylvania Bulletin No. 99:

50 lbs. best stone lime (90-95% calcium oxide).

100 lbs. sulfur (powdered commercial 99½% pure).

Water to make 50 to 55 gallons total product.

Put 10 gallons of water in kettle and start fire. Place lime in kettle. After slaking is well started add the dry sulfur and mix thoroughly, adding water enough to maintain a thin paste, which requires about 5 gallons. After slaking and mixing are completed, add water to make about 50 gallons; bring to a boil and stir until the sulfury scum practically disappears. Then add water to make about 60 gallons and boil down to 50 or 55 gallons. The material should be kept well stirred, especially during the early stages of the process. The time of boiling should be until the sulfur granules are evidently dissolved, generally 40 to 60 minutes. Pour or strain the clear liquid into a barrel or other storage vessel that can be completely filled and corked, or cut off air contact with a thin layer of paraffin or any other heavy oil; this prevents formation of crystals.

When ready for use, test the concentrate with a Beaumé hydrometer and dilute according to the following table:

Concentrate testing degrees Beaumé	Dilute for peach leaf-curl trees dormant	Dilute for apple, pear, cherry summer spray
35	1-16½	1-43½
34	1-16	1-42½
33	1-15½	1-41
32	1-15	1-40
31	1-14½	1-39
30	1-14	1-37½
29	1-13½	1-36
28	1-13	1-35
27	1-12½	1-33½
26	1-12	1-32½
25	1-11	1-31

Arsenate of lead may be added to the diluted concentrate at the rate of two to three pounds to 50 gallons. Do not use paris green, arsenite of lime, or arsenite of soda with lime-sulfur.

SELF-BOILED LIME-SULFUR

This is not a boiled solution, as might be inferred from the name. It is prepared by placing in a barrel eight lbs. best stone lime, to which is added a small quantity of cold water to start it slaking. Eight pounds of sulfur worked through a sieve to break up the lumps is then added slowly to the slaking lime, which is kept from burning by the addition of just enough cold water so as not to drown it. The slaking mixture

must be stirred constantly. Just as soon as the slaking is completed (which should be in 5 to 15 minutes) fill the barrel with cold water (50 gals.). The mixture is strained into the sprayer tank through a sieve of 20 meshes to the inch. It must be agitated constantly while being applied, as it settles rapidly. When properly made, this is simply a fine mechanical mixture of lime and sulfur produced by the heat and bubbling action of slaking and should have but little sulfur in solution. This mixture is especially adapted for the spraying of peaches and plums in foliage, as it causes no injury. Arsenate of lead may be added to this mixture. U. S. D. A. Bureau Plant Industry Circular 27 and Bureau of Entomology Circular 120.—*Cornell Bulletin* 283.

THE COST OF SPRAYING AS FIGURED BY THE NEBRASKA EXPERIMENT STATION

Number of orchards sprayed, 16.
 Total number of trees sprayed, 3,300.
 Average age of trees, 18 years.
 Average number of sprayings per year, 4.
 Average quantity of spray per tree each year, 13 gallons.
 Average quantity of spray per acre (50 trees), 650 gallons.
 Average cost of spray material per 100 gallons, 87 cents.
 Average cost of applying spray per 100 gallons, 98 cents.
 Average total cost of spraying per 100 gallons, \$1.85.
 Average annual cost of spray material per tree, 11.3 cents.
 Average annual cost of applying spray per tree, 12.7 cents.
 Average total annual cost of spraying per tree, 24 cents.
 Average total annual cost of spraying per acre (50 trees) \$12.

RESULTS OF SPRAYING

Average annual yield and net value per tree:

Sprayed trees—

Marketable fruit (4.4 bushels at 52 cents) \$2.28

Culls and windfalls (1.1 bushels at 6 cents)07

Total (5.5 bushels at 43 cents) \$2.35

Unsprayed trees—

Marketable fruit (1.8 bushels at 41 cents): \$0.73

Culls and windfalls (1.7 bushels at 5 cents)08

Total (3.5 bushels at 23 cents)81

Difference between sprayed and unsprayed trees . . . \$1.54

Average cost of spraying24

Average net gain from spraying \$1.30

Average annual yield and net value per acre (estimated on basis of 50 trees):

Sprayed trees—

Marketable fruit (220 bushels) \$114.40

Culls and windfalls (55 bushels) 3.30

Total (275 bushels) \$117.70

Unsprayed trees—

Marketable fruit (90 bushels) \$36.90

Culls and windfalls (85 bushels) 4.25

Total (175 bushels) \$41.15

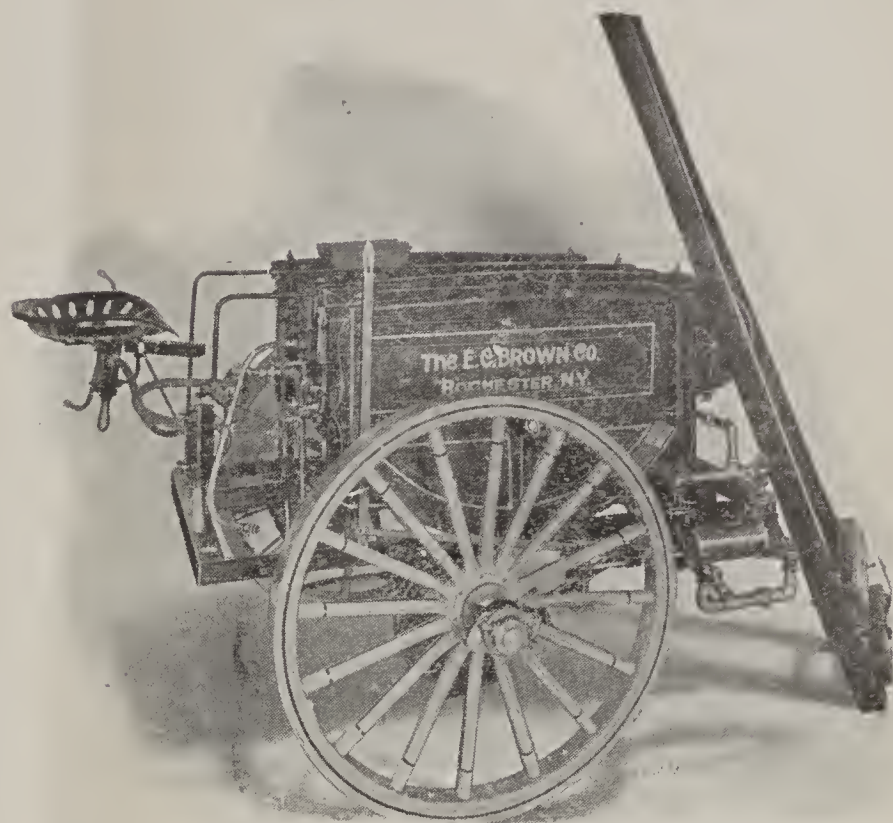
Difference between sprayed and unsprayed trees . . . \$76.55

Average cost of spraying 12.00

Average net gain from spraying \$64.55

AUTO SPRAY NO. 15

Capacity 65 and 100 Gallons



Weight, packed for shipment, 600 and 700 pounds

Traction power combination sprayer. Can be rigged for vineyard, potatoes, and small growing stock. One attachment can be easily substituted for the other by simply disconnecting at the shut off.

The vineyard attachment is arranged with three nozzles on a side which have a liberal adjustment in all directions.

Field equipment comprises either 4, 5 or 6 row potato attachment, according to requirements. Pressure maintained on six nozzles anywhere up to 150 lbs. or over. These machines are exceptionally light of draft, owing largely to the perfectly smooth drive mechanism.

Our Exchanges

McNeil, W. Va.—The Valley View Orchard Co., has been incorporated to engage in the orchard and nursery business with an authorized capital stock of \$25,000.—*The Florists' Exchange*.

A NEBRASKA NURSERYMAN

Lincoln, Neb.—F. G. Yule, who has been associated with the C. S. Harrison Nursery of York, Neb., for the past two years, has disposed of his interests in that company and will start in the nursery business here. His efforts will be devoted largely to handling ornamental trees, shrubbery and perennials. Wholesale and surplus lists desired.—*The Florists' Exchange*.

RETAIL APPLE PRICES

Note the interesting round-up of figures regarding the profit of the retailer of apples which appears in the *New York Packer* for January 27, 1912.

Only three months to the Convention at Boston. Let's have a record gathering in "The Hub."

INFORMATION ON SPRAYING MACHINES

SELECTING A SPRAYER

By C. H. CLARK

Recently a statement was made in one of the Bulletins of the United States Department of Agriculture, that insect pests do more harm to our forests than forest fires, the damage from which amounts to many millions of dollars annually. If these pests work such damage on our hardy forest trees, the losses they and fungus diseases cause in orchards, farms, and garden crops must be an almost inconceivable quantity.

As one of the chief factors in combatting these pests and preventing this enormous loss to crops, the spray pump has become one of the most valuable devices ever produced for the agriculturist. Its importance is such that no fruit grower, farmer or gardener can afford to do without one, and the selection of a sprayer is a matter worthy of careful thought and investigation.

Different conditions require different types and capacities of spray pumps, and to enable every agriculturalist to obtain a pump to fit his special requirements, the leading manufacturers have developed a large number of styles and capacities of spray pumps. In this article we will give a brief description of the most widely different types and enumerate the classes of services for which each of the different pumps is particularly suitable.

BARREL SPRAYERS

FIG. 1

This type is operated by hand and is suitable where the acreage to be sprayed is small. In general, it is used in orchards of 300 trees or less. Where labor is cheap, however, many of the large orchardists use several of this

type of sprayer rather than a single

larger outfit. Barrel carts are provided on which the sprayers can be mounted and moved from place to place easily.



FIG. 1

TWO CYLINDER HAND SPRAYERS

FIG. 2

This type of sprayer comes in between the barrel sprayer and power outfit, being used where operations are too extensive for the barrel sprayer and where the orchard is not quite large enough to warrant the use of a power outfit. It is



FIG. 2

generally used in orchards that have from 300 to 500 or 600 trees, and is mounted on a sled or wagon with the barrels of solution. The pump illustrated is also largely used for cold water painting and white washing in barns, factories, and other large buildings of this type.

SMALL HAND SPRAYERS, BUCKET TYPE

FIG. 3

This pump is used in connection with a bucket or tank and is suitable for garden or green house work, in spraying shrubs, vines, etc., in fact any service where the operations are not very extensive. It is also used a great deal for white washing fences and small buildings, spraying cattle with mixtures to protect them from flies, for washing vehicles, sprinkling floors, etc.



FIG. 3

POWER SPRAYERS

FIG. 4

This sprayer is made for use in large orchards having from 500 trees up to several thousand. With this equipment two men can do the work of several with hand sprayers, and in

large orchards a big saving is made in this way in labor, cost, and time. A jack is provided for connecting the pump to a gasoline engine, and the outfit is so arranged that the engine can be detached at any time and used for other duties when the sprayer is not in use. Outfits are made up with this type of pump mounted on truck together with tank, engine, tower, etc., so that the whole spraying equipment can be easily moved about in the orchard.

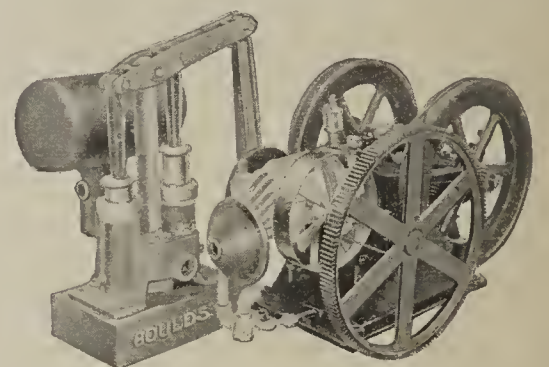


FIG. 4

TRACTION SPRAYERS

FIG. 5

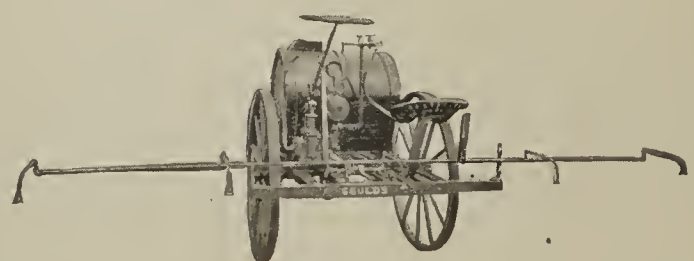


FIG. 5

This outfit is drawn by a horse, and power is obtained by a gear attached to the wheels. It is largely used for spraying

field crops, such as potatoes, tobacco, etc. It can also be equipped with special attachment for spraying vineyards and even for spraying trees. This outfit is also useful for spraying field crops to kill off the weeds, solutions being available which will kill the weeds without injuring the crops.

FIELD CROP ATTACHMENT

This is a special attachment for mounting on the end of a wagon which can be used as a field crop sprayer in connection with any hand or power spray pump.

NOZZLES

The nozzle is one of the most important parts of the spraying outfit, as upon it depends the distribution of the spray, and therefore, the effectiveness of the work.

MISTRY JR.

FIG. 7

This type of nozzle is used for general spray service in orchards. It produces a perfect spray, applying the mixture in a fine fog and covering a large area.



FIG. 8

LENOX

FIG. 9

This nozzle is made especially for whitewashing and applying cold water paint. The nozzle is constructed so as to apply the whitewash in a proper manner and prevent clogging.



FIG. 9

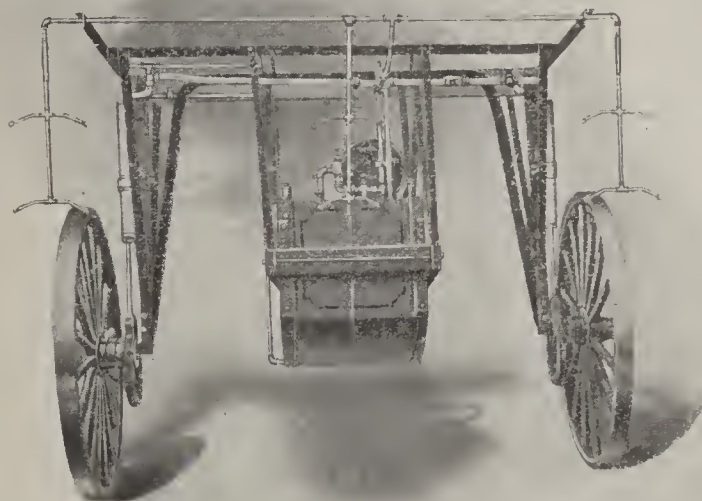
These are only a few of the many types of sprayers and fittings made. Interested parties can always obtain additional data by writing any of the spray pump manufacturers, who are always glad to send catalogs giving complete information.

In selecting a sprayer, after deciding upon the type that will be most suitable, the one thing the buyer should keep in mind ahead of everything else is *quality*. The effectiveness of spraying depends entirely upon how well it is done; and to spray properly one must use a pump that is designed right and built right. The spray must be applied in the proper degree of fineness and quantity, otherwise one might just as well not spray at all.

It is very essential, therefore, that the agriculturalist make sure that he is buying from a reliable manufacturer, one

whose goods are known and have proven right by long service. With this precaution, it is a predetermined fact that spraying will return his investment many-fold.

BROWN'S SPECIAL NURSERY STOCK SPRAYER



This machine is designed for spraying large stock, the axle clearing 6' from the ground, and there is sufficient room between either side of the tank and the side of the axle to pass over large stock. The wheels track 7'. The nozzle arrangement permits spraying three rows, that is, two rows complete and the inside of the two outside rows.

The spray boom may be moved up or down, also additional nozzles can be used on the horizontal for spraying the tops of rows.

The tank has a capacity of 65 gallons and the horse walks immediately in front of the tank. This machine has been very successfully operated by a number of the largest nurserymen, whose names will be furnished on application.

STARK BROTHERS' ADVERTISING MANAGER RESIGNS

The Stark Brothers' Nurseries and Orchards Company has recently lost one of its most efficient helpers in the person of Earl M. Wilson, who during the past four years has been the Company's advertising manager. Mr. Wilson, formerly of Chicago, goes back to that city to accept a very desirable position with the advertising department of the Curtis Publishing Company of Philadelphia. Mr. Wilson is Mr. W. P. Stark's son-in-law.

The nursery catalogue of Messrs. Ellwanger & Barry of Rochester, New York, received a very flattering notice in the daily press of Rochester some weeks ago. *The Post Express* gives a column or so to the descriptive details of the catalogue, which is designed to be educational, as well as to cover the necessary commercial features of such publications.

It is stated that the fruit trees in the Grand Valley of Colorado are in better condition than at this season for many years. The continued cold weather of the winter has retarded the development of fruit buds, so that there is almost no doubt of a record crop.

EDITORIAL WANDERINGS

The Coming of the South

A journey from Ithaca to North Florida during the latter part of January and the early part of February revealed the fact that the cold wave which was then blanketing the New England and Northeastern states was exceedingly widespread in area and influence. It usually follows that a cold winter in the North means a proportionate lowering of temperature in the South. A letter from a friend in Ottawa, Canada, recently says that they are experiencing the coldest winter in fifty years. While no severe damage has resulted in the South from the low temperatures, nevertheless weather has been continuously and markedly cooler than usual. In the vicinity of Washington the amount of ice noticed was exceptionally large. For instance, it is unusual to find the Potomac River frozen from bank to bank, as is the case at this writing.

In the hotels in Georgia and Florida, one finds the heaters in the rotundas of the hotels and the fireplaces in the homes very popular places of resort. The fact that these fireplaces are more cheerful than satisfying is also impressed upon the visitor from the North. The region in which steam-heated houses are found is gradually widening its boundaries.

The periodical visitor to the South cannot fail to notice increasing activity in all agricultural lines. This activity is more pronounced than in other lines of industrial effort. The crop situation from the farmer's standpoint is somewhat unsettled in the Gulf States, especially with reference to cotton. There are two factors affecting this. One is the steady and apparently uncontrollable approach of the boll weevil from the Southwest; the other is the comparatively low price of cotton at the present time. These two causes conspire to lessen the cotton area, and it is probable that much less cotton will be planted the coming season than last year, or in recent years. The southern farmer is properly and profitably considering diversification of crops. He is finding that good profits are securable from the cultivation of cowpeas for seed and for hay, of oats, of corn, velvet beans, and in some sections wheat and Irish potatoes. The cultivation of truck crops where irrigation is feasible in South Georgia is being attempted on a somewhat experimental scale. Of course cantaloupes and watermelons are grown in southeastern and southwestern Georgia to a considerable extent.

The interested agricultural visitor learns that land is steadily increasing in value. He also notices that more than incipient attempts are being made to boom farm lands in certain sections. These efforts are usually backed by non-resident promoting companies. They are much to be deplored. Nothing will injure the country more seriously than campaigns of this sort. Land values are more or less fictitious at the best, but that region which has been developed on inflated valuation is sure to suffer serious reaction. The Pacific Northwest has suffered a boom and is now realizing its consequences. The people of the South are usually too ready to welcome outside promoters without reference to their status or standing. They forget that the land promoter is

after money first, and not so seriously interested in the upbuilding of the country as his enthusiastic statements imply.

SPECIAL INDUSTRIES

Prominent among the special crop enterprises of the country, particularly of South Georgia and North Florida, is the growing of pecan trees and the establishment of pecan orchards. The growing of trees during the past years has made a good deal of money for a good many nurserymen, and unquestionably the next five years will prove a profitable period for these same men. Whether the business will be overdone after that is a question that is likely to be answered on the affirmative side. Orchardists who are planting the trees are as hopeful of making money from the nuts in the future as the nurserymen are sure about making money out of the propagation of the stock in the present. The next ten years will develop an interesting story in both of these lines.

Southwest Georgia is the scene of large pecan enterprises promoted by companies good, bad, and indifferent. Some of these are of the most pronounced promoting types, while others have the interest of the purchaser, as well as the interest of the enterprise itself, closely at heart. Both South Georgia and North Florida are the regions of greatest activity in pecan nursery propagation, and in pecan orcharding. Some of these companies are unquestionably unreliable. They are backed by neither knowledge nor experience, and are stimulated by merely a hungry desire for money. In our judgment their status and standing would be a proper subject for investigation by the United States Post Office Department.

Among the regions which have shown greatest activity in orchard planting are Monticello, Florida, in the northern tier of counties of that state, Albany and vicinity, Georgia. In Monticello probably six thousand acres have been set out to pecan orchards in the last four or five years, while it is probable that the nurseries in that vicinity have an output of between three and four hundred thousand pecan trees per year. A single nursery this year has grafted over sixty thousand stocks, which, of course, is a small number as compared with peach and other fruits, but an exceedingly large number for these relatively expensive trees. In the vicinity of Albany, it is safe to say that over fifteen thousand acres have been planted during the same period. The orchards in the main are being intelligently cared for, but as stated above, the industry as a whole is suffering from the influence of irresponsible boomsters.

THE PEACH INDUSTRY IN GEORGIA

Ten years ago South Central Georgia was the scene of great activity in peach planting. Thousands of acres were set out. Some of these orchards have been profitable, and some have not. Transportation difficulties, picking and packing expenses and troubles, and climatic vicissitudes have

all tended to reduce profits. Planting in this region is now proceeding on a much more conservative basis than formerly. During the past four or five years, however, a considerable increase in interest, resulting in the establishment of large peach areas, has occurred in the hilly regions of North Georgia. Here in the elevated and picturesque part of the state, large areas have been cleared and planted with peaches.

These orchards are in the main just approaching maturity. It is probable that the unusual cold weather of the present winter will cut down returns seriously in the northern part, while the excessively warm weather of October and November, 1911, will reduce crops in the southern portion, so that on the whole, Georgia may not expect a large peach crop in 1912.



TENNESSEE NURSERYMEN IN SESSION

Our Book Table

FLOWERS OF THE FIELD, Rev. C. A. Johns. Published by the Society for Promoting Christian Knowledge, London. Price, \$1.87. 5" x 8". 611 pages. Illustrated.

The thirty-third edition of this book, which was first published in 1853, has just appeared, being edited by Prof. G. S. Boulger. Besides giving about half as many small illustrations as there are pages in the book, the volume contains sixty-four colored plates. While intended as a handbook of British flowers, the work describes, of course, many which are found in the United States, as well. The coloring is not always reproduced exactly as we see it in this country, but there would be little if any difficulty in recognizing friends from their representation by means of the colored plates. In connection with the latter, the English names are given first, with the Latin terms in parenthesis; but with the other illustrations, the opposite method is used.

It is the attempt of the author to make the book attractive to those who are not thorough students of botany. An introduction of fifty pages is a valuable help in this direction. The book will certainly continue to have the popularity which its many editions indicate.

ADORNING THE BEULAH LAND OF THE HITHER SHORE AND HOW TO BECOME AN EXTINGUISHED MINISTER, C. S. Harrison, York, Nebraska.

This is a publication which will hold the reader's attention from beginning to end, partly through the many well told incidents, partly through the interest in the personality of the writer. He depicts the pathos of a life almost worn out in service, then apparently forgotten by the community which has received the benefits. Hard indeed, frequently, is the lot

of the minister who is without experience in any sort of remunerative work to which he can turn when forced, for one reason or another, to lay down the burdens of the ministry. Mr. Harrison, when well on towards seventy, turned his attention to the plants he loves, and since that time has published works on the phlox, the peony, the iris, and several others, in addition to his regular research work with plants.

QUARANTINE MATTERS IN CALIFORNIA

At an extra session of the California State Legislature on December 24, a law was passed which is aimed to protect the state more effectually against certain insect pests. We learn through the *California Fruit Grower* that "It provides that all persons bringing into the State trees, shrubs, buds, or fruit pits must notify the State Commissioner of Horticulture, or county deputies, and hold the same until after inspection. If the plants are found to be infested by fruit pests, they must be disinfected or destroyed."

THE NATIONAL NURSERYMAN,
Rochester, N. Y.

Dear Sirs:

We enclose you check for \$1.00 in payment of THE NURSERYMAN another year, we can't do without it.

Sedgwick, Mo.

Yours truly,
THE SEDGWICK NURSERY.

Within a few weeks The W. & T. Smith Company and Theodore J. Smith, nurserymen of Geneva, New York, have sold their interests in the New England Nurseries at Bedford, Massachusetts.

W. Walker, of Honeoye Falls, N. Y., attended the Horticulturists meeting at Rochester and called on his friends while in that city.

The National Nurseryman

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Stocks of all kinds. It circulates throughout the United States,
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Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.;
secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second
Wednesday in December.

SPRAYING

The memory of almost the youngest of us
associated with fruit growing or tree
growing runs back to the time when
spraying as an orchard praetice had no
standing. Today the up-to-date orchard-
ist considers it as essential to the successful management of
his orchard tracts as fertilizing and pruning. The nursery-
men are not quite as far advanced. Nevertheless, it is fair
to say that we are in a spraying era. The nurserymen have
been somewhat slow to adopt spraying methods, for the reason
that machinery suitable to their needs has not been evolved.
It is felt, however, that it is really a proposition of dollars and
cents in many sections. The orchardists who spray represent
the survival of the fittest. In other words, the man who
does not spray is the man who goes out of business. The
nurseryman is perhaps not affected to an equal extent, but
nevertheless his situation is not widely different from that of
the orchardist.

It is interesting to note that a type of spray machines
suitable for nursery operations is now being devised and
largely through the efforts of the nurserymen themselves.
Progress in the past in this direction has been somewhat slow,
because the demand has been slight. But this is increasing,
and as demand grows, it will be met by a supply of suitable
machinery, as is the ease in other lines of farming and fruit
growing. The problem of spray machinery is largely one
which concerns the nurserymen themselves. They are the
persons who understand the requirements best, and to the
mechanically ingenious in the fraternity of plant growers we
shall have to look for aid in the development of a type of spray
machines adapted to nursery requirements.

COST OF PRODUCING NURSERY STOCK

A very popular theme being freely dis-
cussed at conventions and meetings at
the present time is the high cost of food
products. At a recent convention in
Albany, more than half the time of the
meeting was devoted to this subject.
The cost of producing nursery stock has been considered by
various persons who have appeared before the annual con-
ventions of the society from time to time. This subject, we
believe, is also being agitated at the present time by a farm
journal noted for its efforts to regulate the morals of the
public. We learn that it is just about ready to brand as
"daylight robbery" the selling of fruit trees at figures higher
than twenty-five cents per tree, and this is based upon the
innate knowledge and inside information which this journal
has secured.

In considering this question, that is, the cost of produe-
tion, and studying the methods of these good people who
know nothing about the nursery business, one is very much
struck by their unsophisticated system. They usually
capitalize the soil at so much per acre. They charge for seed
or seedlings, for cost of cultivating, for fertilizing, for pruning,
possibly spraying, digging and packing. The total of these
items is to represent the cost of the tree. But is this true?
What is the nurseryman's time worth? How often is this
considered? How often does the office calculator leave a
margin for loss by elimatie vieissitudes—frost, hail, and so

forth? We know cases where a local hailstorm destroyed the nurserymen's crops for at least two years; not only destroyed his revenue, but added one hundred per cent. to the cost of development and maintenance.

What about depreciation of plant? Horses, mules, implements, machinery in general, wear out. What about selling expenses? The office does not maintain itself, and catalogues are not furnished free by philanthropic printers, and salesmen are not missionaries who live on starvation salaries.

The above are some of the contingencies which are usually forgotten in figuring cost of production. The nurseryman may hit it one year; the next year the tables are turned, and he is the one who gets hit.

The manufacturer figures cost of production, adds as much more for contingencies or overhead charges, and then adds his profit. The nurseryman who is going to make more than a mere living, and expects to stay in the game, must do something of the same sort. We believe the proper principle and motto to keep before the nurseryman's eye is to grow good stock, deliver it in good condition, charge a good price, and then make the purchaser responsible for handling that stock after it reaches him.

THE FEDERAL INSPECTION BILL The Committee on Legislation, of which Mr. William Pitkin is chairman, appointed and fully authorized by the Association at its last annual meeting in St. Louis to consummate such a bill as in its judgment was wise, has been working consistently and vigorously with the U. S. Department officials for sometime in the effort to adjust the provisions of the bill to meet the trade requirements of the nurserymen and the legislative wishes of the Department officials. It is possible that the bill may become a law before another issue of this journal appears. The main point of difference between the two parties to this legislative agreement is connected with the administration of quarantine or rather restrictive legislation to domestic insects and diseases. This journal has frequently placed itself on record as favoring legislation aimed to prohibit the importation of plant enemies. The foreign features of this bill are satisfactory to the nurserymen, but the regulation of the domestic features is questionable. The fact that the bill provides for quarantine against insect or disease new or not widely distributed leaves the matter in such indefinite shape as to allow each case to be an open one, and to be arbitrarily passed upon by the federal horticultural commission.

It may sound somewhat heretical from our standpoint to raise the question of the efficiency of legislative enactments in the control of injurious insects and plant diseases, but it is worth while asking, is there any case on record in which in the United States an injurious insect or a plant disease has been controlled by measures provided under legislative enactment? If so, what are the instances? We recall that San José scale has been legislated against by almost every state in the Union, and that all sorts of prohibitive regulations are in force. Is it not a fact that San José scale is found at the present time in practically every state in the Union where the climate will

permit it to grow? Is this condition not also true of most other scale insects which have been established in any one portion within our borders?

The codling moth was said a few years ago to be unknown in certain fruit districts of the Northwest. The best information we have is that it is now established in these districts despite prohibitive and drastic inspection laws.

The fight against the chestnut bark disease and the gipsy and brown tail moths are also cases in point. Unquestionably the rapidity of spread of these enemies will be somewhat restricted, but are they not bound to cover the area where natural conditions will permit them to grow?

In our judgment, the great value of such legislative enactments as have taken place lies in their educational influence, and not in their restrictive influence, and the point now arises whether education along these lines cannot be more cheaply dispensed in other ways. The fight against enemies has become an individual one, and it simply resolves itself into the condition that the nurseryman or fruit grower who does not fight these enemies will go to the wall or be put out of business. The man who fights them is the one who will and ought to survive. Let educational campaigns be conducted by all means so that plant and fruit growers may know what they have to fight and how they should meet the enemy. But in our judgment the battle now is up to the individual himself. Let the government keep out foreign enemies as they should have done in the past, but do not hamper trade by domestic restrictions which are without practical results, and only harass the leaders in horticultural work.

Obituary

WILLIAM SMITH, OF GENEVA, DEAD

FOUNDER OF OBSERVATORY AND WILLIAM SMITH COLLEGE

Geneva, Feb. 7.—The death of William Smith, aged 94 years, occurred last night at his residence on Castle Heights, after an illness of several weeks due to old age and a general breaking down. Mr. Smith was one of the leading nurserymen in this section and was Geneva's philanthropist.

For a half century he had been one of the leading business men of Geneva, while in his later years he became one of the city's greatest benefactors, establishing the astronomical observatory that bears his name and founding William Smith College for Women as a co-ordinated women's department for Hobart College. Mr. Smith leaves only nephews and nieces. The funeral took place Friday afternoon from his late home, Rev. Langdon C. Stewardson, D.D., president of Hobart College officiating.—*Geneva Times*.

The sad news comes to THE NATIONAL NURSERYMAN of the death of Mrs. William C. Barry of Rochester. Besides her husband she leaves three sons and a daughter, all of Rochester. Mr. Barry's many friends in the nursery trade will sympathize with him in his great loss.

Legislation

RETROSPECTIVE OF RECENT ATTEMPTS AT FEDERAL LEGISLATION

Such legislation concerns those whose duty it is to administer such a protective measure and those who would enjoy its protection. Since both recognize the advantages of such legislation, it may be wondered why such a law has not been in force before this.

From careful and extended discussion of the matter, which I heard presented last June, before the St. Louis meeting of the National Nurserymen's Association, it appears that between the two interests there has existed a difference of opinion regarding the proper administrative policy.

During the meeting of the American Association for the Advancement of Science at Washington last December, a conference lasting several days was held by the representatives of the interests concerned. This conference was composed of Chairman William Pitkin, of New York; Messrs. Irving Rouse, of New York; W. P. Stark, of Missouri, and W. H. Wyman, of Massachusetts, of the Committee on National Legislation of the American Association of Nurserymen; Mr. C. L. Marlatt, of the Department of Agriculture; and Professors T. B. Symons, of Maryland, E. D. Sanderson, of West Virginia, and E. L. Worsham, of Georgia, representing the National Horticultural Inspectors. These representatives worked with commendable zeal and deliberation in their endeavors to reach a fair and reasonable solution of the problem.

The Western Nurserymen's Association asked the writer to become, with Mr. Stark, a member of their committee and he accepted, as a representative of the University of Kansas, and therefore, served without expense to any interest concerned.

After several conferences, the plan was finally adopted whereby the administration of the proposed federal law would be vested in a commission of five, to be appointed by the Secretary of Agriculture and to consist of the Solicitor of that Department, two from the Bureau of Plant Industry, and two from the Bureau of Entomology. The administration of this law in the various states was to be referred by this commission to the proper state officials. Quarantine was to be restricted to insects "new and not theretofore widely distributed in the United States."

This was a tentative plan adopted subject to the approval of the Secretary of Agriculture and the Legislative Committee of the National Nurserymen's Association. A bill containing the policy agreed upon was drafted and sent to the Secretary of Agriculture and the Legislative Committee.

On the National Legislative Committee of the Nurserymen's Association, there are twenty-two members, and as yet sufficient time has not elapsed for an expression of opinion to have been received from all of these. In the meantime, however, this bill, with certain modifications, has been introduced into the House as H. B. 18000, ordered printed, and referred to the Committee on Interstate and Foreign Commerce.

I have delayed writing to you, hoping to have for you a full expression from the Nurserymen's Legislative Committee on the conference agreement. Sufficient time has hardly elapsed yet to make this possible, nor to have their views on the modified bill introduced and referred.

This much may be said, however, that the members of the conference committee on their adjournment from Washington were unanimous in the opinion that at that time conditions had never been more favorable for the enactment of the safe federal legislation which should prove of great benefit to the country as a whole and to the various interests concerned.

S. J. HUNTER,
State Entomologist.

PROGRESS ON FEDERAL LEGISLATION BILL

It was confidently expected by the Committee on Legislation that by this time an agreement satisfactory to all parties concerned in this bill would have been reached. Owing, however, to the hasty introduction of the bill by the Bureau of Entomology, and a misunderstanding as to who was in authority in accepting certain of its provisions, the members of the Committee have found it necessary to withhold their support from the bill until the features mentioned in the last issue of THE NATIONAL NURSERYMAN are made satisfactory to all parties concerned. At latest accounts, negotiations are in progress.

Mr. Pitkin writes under date of February 13 that the Western section of the Committee on Legislation had notified Mr. Marlatt that they had withdrawn their support of Bill No. 18000. The representatives of the Western Association feel that the departments from which the members of the commission are chosen, as provided in Section 2, should be definitely stated. It is the view also of Messrs. Stark and Hunter that all notices of inspections or possible quarantines should be sent to the state official charged with the duty of inspection. The Committee as a whole will, of course, support these contentions, but the view of the Chairman is that the most vital point of the bill is that mentioned in THE NATIONAL NURSERYMAN the last issue, in Sections 8 and 9. The Committee would like these sections amended to read:

"That whenever, in order to prevent the introduction from any foreign country into the United States or any of its possessions of White Pine Blister Rust, Potato Wart or any tree, plant, or fruit disease, or of any injurious insect new to or not theretofore discovered in the United States," and

"That the Commission is authorized and directed to quarantine when it shall determine the fact that White Pine Blister Rust, Potato Wart or a dangerous plant disease or insect infestation, newly discovered in the United States, exists in such state or territory."

As Mr. Pitkin adds, "We claim that these proposed wordings agree with the verbal arrangement made in Washington, which was that the quarantine should apply to insects and diseases new to the United States plus White Pine Blister Rust and Potato Wart, and further that we are ready to stand by our agreement and support any bill that conforms to it, but that the printed bill 18000 does not conform to it, and we shall oppose it."

NUT PROMOTIONS

By DR. W. C. DEMING

From the Report of the Northern Nut Growers' Association,
of which the Author is Secretary

Promoters attack their quarry with a two-edged sword; one edge is what they say, the other what they leave unsaid, and both edges are often run.

What they say generally has a foundation of truth with a superstructure of gilded staff. You must knock over the staff and examine the foundations to see if they are laid up in good cement mortar or only mud. Sometimes they are honestly laid, but your true promoter can no more help putting on his Coney Island palace of dreams than a yellow journal reporter can help making a good story of the most everyday assignment. I suppose he takes a professional pride in it, even when the facts themselves are good enough. So you never can say that because of the evident gilding there is nothing worth while beneath.

What the promoter does not say it is absolutely necessary for the safe investor to find out. Deductions from experience in general and from knowledge of the business in particular will help, and when these favor further investigation, there are two essentials for a wise decision. First, a study of the records of the promoters, and, second, a personal examination of the property. If these can be thoroughly made and the results are satisfactory after a suitable period of mental incubation, if the prospects will stand the candle test for fertility, you may put some money on the chance of a good hatch; remembering, too, that many a good hatch afterward comes to grief with the pip.

Some promotions are conceived in iniquity, some in drunkenness and folly, and some are abortive from incapacity. Your legitimate and well-born, well-brought-up promotion, fathered by ability and mothered by honesty, it is your problem to recognize, if that is what you are looking for, and to avoid the low-born trickster or incapable. No one can tell you how to do this any better than they can tell you an easy way to graft hickories.

The northern nut grower is not yet bothered with northern nut promotions. At most he is called on to discount the statements of sellers of trees, and that a little, not too expensive, experience will teach him. The West is apparently too busy selling fruit and fruit lands to lay out nuts to trap eastern nibblers. But the allurements of pecan growing in the South are spread before us with our bread and butter and morning coffee. The orange and pomelo properties have been banished from the stage, or made to play second fiddle, and now we see in the lime light the pecan plantation with a vista of provision for old age and insurance for our children. And there shall be no work nor care nor trouble about it at all. Only something down and about ten dollars a month for ninety-six months. And the intercropping is to more than pay for that. It is indeed an enticing presentation.

Although we have as yet no northern nut promotions, we may expect the time when the sandy barrens of the shore and

the boulder pastures of the rock-ribbed hills will be cut up into five-acre plots and promoted as the natural home of the chestnut and the hickory, holding potential fortunes for their developers. I hope it will be so, for it will postulate a foundation in fact. But the chestnut blight and the unresponsiveness of the hickory to propagation as yet hold up these future camp followers of the northern nut growing pioneers. So that for the present there is only the sword of the southern pecan promoter to parry. It would be a work of supererogation and effrontery for me to attempt to treat this subject in particular, since it has been so clearly and ably done by Mr. Van Duzee of St. Paul, Minnesota, and Viking, Florida, from the standpoint of long experience and full knowledge. His paper should be read by all interested persons.

I may be permitted to make the following quotations from it:

"The pecan as an orchard tree has recently been discovered and its history has not been written. The record at present is largely based upon scattered individual trees growing under abnormal conditions which, as a rule, are favorable.

"Calculations and deductions based upon these results have been made which are fascinating, but they are utterly unreliable when applied to orchards of other trees in different localities growing under totally different conditions.

"No one knows what a pecan orchard grown under such conditions is going to do."

Mr. Van Duzee expresses, however, the greatest belief in the success of pecan growing under proper personal supervision.

It all comes down to the question, "Can you or I hire our business done for us, never go near it ourselves and expect others to make a success of it for us?"

And yet when all is said, I confess that I myself have been sorely tempted by my faith in the present and future of pecan growing in the South. I might have invested, were it not for my firm belief that in nut growing the North is but a few years behind the South, and that I wish to devote my resources and my energies to having a hand in a development which, I share with you the belief, is to be of inestimable benefit to the human race. We can picture the day when our dooryards, our roadsides, our fields and hills shall be shaded by grand old nut trees, showering sustenance and wealth on our descendants and all people, and bearing the names of their originators; when the housewife of the future shall send her wireless call to the grocer for a kilo of Hales hickory nuts, the Rush, the Jones, the Pomeroy Persian walnuts, the Black Ben Deming butternut, the Craig Corean chestnut, the Morris Hybrid hickory, the Papershell Close walnut, or the Littlepage pecan.

Quiz Column

THE TAXATION OF NURSERY STOCK

EDITOR NATIONAL NURSERYMAN.

Sir:—

Can you advise us whether assessment is made on growing nursery stock, and on what basis of valuation the taxation is made? Why should tax be paid on growing nursery stock any more than other growing crops, even tho it holds over from year to year? A nursery may have stock growing the first of April and have it practically destroyed and worthless in some varieties, at least, by the first of June. Trust you may be able to give us the information.

Lake City, Minn.

THE JEWELL NURSERY CO.

Answered by Professor W. L. Drew, Cornell University College of Law:

The question as to whether any particular kind of property shall be the subject matter of taxation is entirely a local matter in each state, and, therefore, a question of legislative discretion. In exercising that discretion, I am not aware that any underlying principle is applied. In determining whether nursery stock is taxable in Minnesota, it is, therefore, merely necessary to examine the statutes. Turning to these statutes, I find in Revised Laws of Minnesota (1905):

Section 794. "All real and personal property in this state * * * is taxable except such as is by law exempt from taxation."

Section 795 states various exemptions, but it does not include nursery stock or growing crops.

Section 797. "Personal property for the purpose of taxation shall be construed to include: * * * (Paragraph 4) All stock of nurserymen, growing or otherwise."

Section 802. "Personal property shall be listed and assessed annually with reference to its value on May 1st."

Section 810: "All property shall be assessed at its true and full value in money. In determining such value, the assessor shall not adopt a lower or different standard of value because the same is to serve as a basis of taxation, nor shall he adopt as a criterion of value the price for which the said property would sell at auction or at a forced sale, or in the aggregate with all the property in the town or district; but shall value each article or description of property by itself, and at such sum or price as he believes the same to be fairly worth in money."

I have examined the Session Laws of 1907, 1909, and 1911, and find nothing modifying the above provisions of the statutes. As you will see from the above, it would seem clear that nursery stock is taxable in Minnesota and taxable at its full actual value.

I have no information as to whether assessors in Minnesota actually live up to their statutory obligations in assessing property at its full actual value. I am aware that great pressure is often brought to bear upon them to prevent them from doing what they are under statutory obligation to do.

BUSINESS ETHICS

EDITOR NATIONAL NURSERYMAN.

Sir:

Could you give me some information, or tell me where I could get information in reference to this matter?

Last fall (1910) some nursery stock belonging to me (which came into my hands in settlement for a debt) was sold to a nurseryman by a nurseryman here, acting as my agent, for I know nothing about this line of business. Now, they told me the price was to be the prevailing price, but as yet I have not been able to find out what the prevailing price was at the time. And, consequently, I have not been able to collect for same; for the purchaser, although he knows I know nothing about the business, will not give me the prices. In fact, I understand from an attorney whom I had look into the case, that he and this nurseryman here attempted to fix up some sort of a deal between themselves. So as the matter stands at present, the purchaser has the stock, but I cannot get him to settle. Of course if I am going to sue I must know what the exact prices were for stock at that time. The stock in question consisted of peach trees, 1st, 2d and some 3d grade, and I have a list of the varieties, if that would be of any use. He was to settle with me the following spring (1911), as I was told that that was the custom among nurserymen to settle then for stock bought in the fall. Any information that you can give me will be greatly appreciated, I assure you.

Boston, Mass.

F. W.

ANSWER: Nurserymen have not standardized prices for nursery stock. The trade differs very materially from the manufacturer's business, in which a definite grade of product commands at a given time a definite price. It differs also from the great staples of agriculture, as corn, cotton, wheat, and the like. The only way, it seems to us, that you can settle your trouble is to refer this matter to a board of arbitration who will look into the quality of stock sold and the prevailing prices at that time. There may be such a great difference in the quality of stock produced by different nurserymen and different parts of the country that, unless you have evidence that your trees represented definite grades of given varieties, you will have difficulty in establishing their value. It would seem to us to be a matter for friendly arbitration rather than a matter for reference to the courts.

FOR YOUR INFORMATION

TO THE EDITOR:

The Foote Farm Laboratories of Fredericktown, Ohio, are putting out what they call the "Foote Soil Testing Outfit." They are widely advertising this outfit and offering it to individual farmers for \$10. They also include in the outfit a copy of my book, "The Story of the Soil," supposedly as an added inducement to the purchaser. I wish to say that I knew nothing of the Foote Farm Laboratories until we began to receive inquiries from their advertisements. We at once ordered an outfit, including all instructions, and have thoroly investigated the outfit and the methods by which the Foote Farm Laboratories claim any farmer can analyze his soil, the following quotation being a sample of their advertising:

"The Foote Soil Testing Outfit is a complete, practical farm equipment with which you can readily tell what plant food each one of your fields needs and what they already have. It tells you just what food elements are in your soil and what is lacking."

A thoro investigation of this outfit clearly reveals the fact that it is absolutely worthless. The so-called directions for testing soil not only give no valuable information, but they are absurd and senseless. The farmer who pays \$10 for the outfit and attempts to use it will have thrown away both his

time and money. I make this statement because my name is being used in a way to mislead.

University of Illinois.

CYRIL G. HOPKINS.

HOW TO HANDLE BUD FAILURES

ED. NATIONAL NURSERYMAN.

Sir:

We have on hand quite a number of peach seedlings we failed to get budded last fall. We are very young in the peach tree business. Could you advise to what advantage these could be used? Could not dormant buds be reserved until sap starts in spring and work on them then, to be cut as soon as set and buds brought to the market next fall?

Lone Oak, Va.

J. M. LEWIS & SONS.

A REPLY FROM VIRGINIA

We beg to state that if your correspondent will cut buds from trees now or before putting out in the spring and bud as soon as they start sap enough to bud in the spring, he ought to make a success. We have not done much spring budding, but we think J. Van Lindley Nursery Company budded a large lot one spring and were very successful with them. We think it would be well to refer your correspondent to J. Van Lindley.

Richmond, Va.

W. T. HOOD & Co.

Answer 2:—We would consider them of no value at all.
Concord, Ga.

SMITH BROS.

Mr. Van Lindley's opinion:

When buds fail, or when we fail to get the stock budded in the summer or autumn, we then resort to spring budding. The buds should be cut during the winter when they are in a perfectly dormant state, and should be kept in a dormant state until spring. As soon as the bark can be peeled, the buds should be put in the same as in the summer or autumn. The buds can be kept in some cool place, perhaps in an ice house. If the buds are pipped a little at the time of budding, so much the better. Good strong buds will start very quickly anyway, and the seedling can be cut back within about ten days.

If the party has good buds and can keep them in good condition, he will have almost as good success by spring budding as he would have had if he had budded in the summer or autumn. At least, that is our experience here, and I have been practicing it for forty years.

Pomona, N. C.

J. VAN LINDLEY.

BOOKS ON NURSERY MANAGEMENT

ED. NATIONAL NURSERYMAN.

Sir:

Please let me know at your early convenience the book or books you consider best on nursery management. Thanking you in advance and assuring you of our appreciation of your paper, I am,

Yours very truly,

Vancouver, B. C.

R. C. McNAUGHTON.

As a matter of fact, we have no book on the growing of nursery stock and the management of nursery trees written from the standpoint of the nurseryman. We have a number of books on the propagation of plants which give in detail the methods of grafting and budding, growing by cuttings and

layers, and the like. But these do not cover many of the problems incident to nursery work. They do not cover the rotation or fertilizing of the crop, the pruning of the trees, the handling and the marketing. The nursery business is one which has largely grown up of itself, and is as yet unrecorded and unwritten.

The two books which will interest the tree grower and plantsman from the standpoint of the propagator are "The Nursery Book," by L. H. Bailey, Macmillan Co., and "The Propagation of Plants," A. S. Fuller, Orange Judd Co. These are both first rate works of their kind, the former being much more comprehensive than the latter. Another work which is of general assistance to the nurseryman is "The Farmer's Rule Book," also by Bailey and the MacMillan Co. These three volumes will give the plant grower a large amount of information, but the practical problems of nursery management he will be forced to get from his own experience.

MACERATING BERBERIS THUNBERGII

ED. NATIONAL NURSERYMAN.

Sir:

What is the best method of macerating the Berberis Thunbergii berries?

Lancaster, Penn.

MARTIN H. MUSSER.

MASH FROM A SIEVE AFTER SOAKING

1. We would recommend putting seed in a sieve, applying water liberally, and rubbing it with the hands. We, however, seldom go through this operation, but bury the seed covering and all in sand and let it take care of itself.

Morrisville, Pa.

THE WM. H. MOON CO.

2. After gathering the Berberis Thunbergii seed, we put it in a water-tight box or cask, put a little water on it, and let it stand there until the pulp rots, then clean the pulp off by rubbing through a sieve. That is the only method we know of cleaning the seed.

Dresher, Pa.

THOMAS MEEHAN & SONS.

3. The method we pursue in macerating the berries of Berberis Thunbergii is as follows: The berries are soaked in water a day or two, then the water is poured off, and they are placed in a firkin or tub and mashed thoroughly with a stick about two inches in diameter at the base. Place the pulp in a strainer and wash with water, in order to separate the seeds as much as possible. Pick out all the seeds possible. If desired, the pulp can be saved and planted with the seed that are not separated therefrom, and you will get some results. The seed is mixed with three times the quantity of sand, and placed in a box with a few holes in the bottom for drainage. Select a shady place under some trees, sink the boxes to the top of the ground, and cover with five or six inches of soil. It is important that the boxes are placed in a shady place where they will not get the direct rays of the sun and will not start too early in the spring.

North Abington, Mass.

THE BAY STATE NURSERIES.

The Officers of the Miami Valley Nurserymen's Association for the year are: W. F. Bohlander, President; M. F. Barnes, Vice-President; M. A. Gaines, Secretary-Treasurer.

Doings of Societies

TENNESSEE NURSERYMEN IN SESSION

The last week in January the Tennessee State Nurserymen's Association met in Nashville, between the meetings of the State Horticultural Society and the State Beckcepers' Association. The connection of the nurseryman's work with that of the members of these other two societies was emphasized. Resolutions were passed extending sympathy to Percy Brown, and to the family of the late Major W. F. Heikes. The latter had been for many years well known to Tennessee nurserymen. There were three sessions of the Association on the twenty-sixth of January, and the members listened to the following speakers:

T. B. Thackston, Bristol, "Co-operation in Selling Nursery Stock and Marketing Fruit;" H. A. Clark, Wartrace, "Grasses;" H. D. Tate, special agent of the U. S. Department of Agriculture, "Field Demonstrations;" Wm. P. Stark, Louisiana, Missouri, "The Federal Inspection Bill;" Robert S. Walker, Chattanooga, "The Quiet Hour of the Nurseryman."

The officers for the present year are: E. W. Chattin, Winchester, president; W. W. Twitty, Taft, vice-president; and G. M. Bentley, Knoxville, secretary-treasurer.

THE NATIONAL NURSERYMAN,
Rochester, N. Y.

Gentlemen:

I enclose memo. regarding meeting of The Connecticut Nurserymen's Association for insertion in your valued publication, also copy of paper referred to therein as being read by Mr. Sierman, which we would also like to see in the columns of THE NATIONAL NURSERYMAN.

The Sixth Annual Meeting of the Connecticut Nurserymen's Association was held at the "Garde" Hotel, Hartford, Conn., February 6, 1912, being called to order at 10:30 A. M. by President Paul M. Hubbard.

Minutes of last meeting were read and approved and the following new members proposed, balloted upon and enrolled: W. W. McCartney, Edward Kelley, T. E. Burroughs, F. L. Thomas, and Gustave Minze.

The report of the Finance Committee showed the Association to be in a flourishing condition.

The following officers were elected for ensuing year, viz.: President, W. W. McCartney, New Haven, Conn.; vice-president, Charles Turner, Hartford, Conn.; secretary, F. L. Thomas, Manchester, Conn.; treasurer, W. W. Hunt, Hartford, Conn.

The subject of free replacement to customers of nursery stock which fails to grow was taken up and discussed, Mr. C.

Sierman of Hartford reading an article, prepared by him on this subject, stating facts as to why this replacement business should be done away with, or at least the manner of its doing be changed, and the general opinion of all seemed to be that the present practice was unfair and unjust to the nurseryman in the majority of cases.

The question of taxation of nursery stock as a crop, as merchandise, or as stock in trade, also taxation of nursery lands in this State, were subjects of discussion, also the matter of the proposed bill on inspection of imported nursery stock. The Association as a body, and the individual members, emphatically objected to such bill, at least in its originally proposed form, as bringing upon them unnecessary hardship and expense.

At 1:15 P. M., the meeting adjourned to the dining rooms of the "Garde," where full justice was done to the good things prepared for them. After the speeches a visit was made to the exhibit of the Pomological Society, where the material fruits of our labors as nurserymen were inspected and admired, bringing to us aptly the quotation: "Great oaks from little acorns grow."

Wishing THE NATIONAL NURSERYMAN a prosperous year, I am,

Sincerely yours,
F. L. THOMAS, Secretary.



The new President of the Tennessee Nurserymen's Association, Mr. E. W. Chattin, of Winchester.

ALABAMA STATE HORTICULTURAL SOCIETY

At the ninth annual meeting of this society, held at Jasper, January 25th, 26th, and 27th, Mr. J. H. McCary of Birmingham was elected president, and P. F. Williams of Auburn, secretary-treasurer. President McCary in his address mentioned the loss the Society had sustained in the death of its former president, Major W. F. Heikes, and Secretary Williams read

a memoir of Mr. Heikes. This, by a unanimous vote of the members present, was put on record as voiced by the Society.

A paper on "Apple Culture in Alabama" was read by Mr. Williams, and the following varieties were recommended: For North Alabama, Early Harvest, Red June, Yellow Transparent, Red Astrachan, Hames, Brilliant, Horse, Arkansas Black, Black Twig, Winesap, York Imperial, Red Reese, Terry's Winter, Yates, and Hall's Seedling. For South Alabama, Early Harvest, Red Astrachan, Red June, Yellow Transparent, Horse, Yates, and Shockley. Mr. R. F. Kolb, Commissioner of Agriculture for Alabama, gave details concerning the work at Montgomery, with special reference to the inspection of fertilizers, foods, etc. An illustrated lecture on injurious insects and spray outfits was given by W. F. Turner, Assistant Entomologist. Other speakers were E. J. Bryan, Blount Springs, on "Commercial Cantaloupe Culture," and Leander Poole, on "Conditions of the Truck Industry in Sumter County."

REGARDING REPLACEMENT OF NURSERY STOCK

Read by C. H. Siernan at the Annual Meeting of the Connecticut Nurserymen's Association, Feb. 6, 1912

Being absolutely without any oratorical gifts, it is not my intention to speak at any length on this question of replacing nursery stock without charge to the purchaser, but I am urged into this by Brother Hunt, and I might as well start the ball a-rolling, bring this matter before you, and let you thresh it out. In fact, I am a firm believer in discussions, knowing that better results will be derived therefrom than from long lectures.

If I don't want to crack old nuts, there is really nothing for me left to say regarding this replacing evil. You are all familiar with it; you all know that this replacing of nursery stock at your cost is an entirely unbusinesslike monstrosity, an absurd foolishness. To think that you sell to some customer some of your goods—with no extravagant profits attached to it—then this customer, in return, neglects to give these goods even ordinary care, and they pass, consequently, off into a better world; or adverse circumstances, elementary influences, etc., cause such plants to die, and you turn around and supply another lot of plants, and this time at your cost. This is, no matter how I focus it, a decidedly silly business transaction.

Any honest business concern will find it to its interest to sell to its customers an honest article, of quality according to the price charged, and should stand behind his goods in case of defects, and if the article is accepted by the customer, the actual business transaction should cease right then and there. In no other line of business, no matter where you look to, may it be beast or machine, will there be any replacing done except for evident flaws. Right across the street here is the store of a live stock dealer and right behind those buildings the stables of several horse dealers; you go and buy a horse from one, from the other a pen of chickens, then go home forget to feed and water your animals, or kill them off by other abuse, or a fire may break out in your barn and these animals, by accident, may burn to death without your fault. Then go you back to these dealers and claim some new animals free of

cost; will they give them to you? They are no such fools! The same might be applied to any other article of merchandise, except to articles handled in this, our blooming profession. But this custom of replacing nursery stock without cost is by no means general. I know many firms (usually they are the most reputable ones) who will not follow that custom, or if they do assume the risk of plantings, they add an additional charge of say 25% to the first price.

Some people who replace will say, "Well, we advance our prices so that we are protected," but this is not right business principles; they are fooling their customers by charging for something that cannot be seen. Would it not be much more consistent with honest business principles, to charge for your goods with your regular percentage of profits but without any replacing guarantee in case of failure, and if anyone wants to have his plants insured against loss charge him an additional 25% or so premium for the risk you are assuming? This would give your customer an opportunity to see what he pays his additional cost for, and the whole transaction would be more satisfactory to all concerned.

I see, with great satisfaction, that the Western Nurserymen have taken action in this matter, and no doubt you all have read about this in THE NATIONAL NURSERYMAN, but I would be more gratified if something similar could be accomplished by the Eastern Nurserymen.

Well, Gentlemen, I shall leave this matter now in your hands for discussion. I thank you for your attention.



PROF. G. M. BENTLEY
Re-elected Secretary of the Tennessee Association

MASSACHUSETTS NURSERYMEN'S ASSOCIATION

President, W. H. Wyman, North Abington, Mass.;
Secretary-Treasurer, A. E. Robinson, Bedford, Mass.
Meets annually first Tuesday in December.

The Charlton Nursery Company offer for this season a selected stock of Standard Fruits, Roses and Hydrangeas. Their advertisement appears on page 83 of this issue.

Among Experiment Station Workers

NEW ENGLAND TREES IN WINTER, Blakeslee and Jarvis, Storrs Agricultural Experiment Station, Bulletin No. 69.

This is not a bulletin in the ordinary usage of the term, it is a volume of nearly 250 pages, splendidly illustrated. It contains a description of the principal trees of New England, as seen in wintertime. Each tree is discussed under the following heads: habit, bark, twigs, leaf scars, buds, comparisons, distribution in New England and in Connecticut, quality and characteristics of wood. The descriptions are supplemented by half tone engravings, giving a view of a mature tree, of the characteristics of the bark, the fruit and its accessories, and the annual shoot, showing bud characteristics.

The work is introduced by an explanation of the method of handling the subject, the means of securing the height of a tree by a simple system of measurement, and a discussion of the winter characters of trees used in distinguishing them. Following this is an analytical key, carrying the form either to the genus or the species, in many cases to the latter.

As a means of stimulating interest in our handsome and adapted native trees, and a means of identifying the commoner forms, this bulletin will be invaluable. It should be in the hands of every nurseryman, and will, when combined with such works as those of Romeyn Hough and C. S. Sargent, provide the nurseryman with a working library of great value.

PROPAGATING THE WALNUT BY BUDDING

An interesting method of budding the walnut is described by E. J. Kraus in circular No. 16 of the Oregon Agricultural College. By the method described, it is claimed that a stand of from seventy to ninety per cent should be secured.

In this method the Persian, the American black, and a hybrid between the California black and the Persian walnut were used. The method differs from the ordinary bud method in that it uses one year old buds, which are found at the base of the current year's growth. These are the buds which have remained dormant while the terminal bud continued the growth of the branch. There are usually on the branch at this point several buds, some much plumper than others. Only the plumpest ones should be used. The author has also used buds from wood cut during the winter and carried through in a dormant condition. The scions are placed in moist sand for a couple of weeks before budding is done, which has the effect of loosening the bark so that they may be readily removed.

The method is practically the patch bud method, which consists in removing the dormant bud with an oblong piece of bark attached and planting it on the stock in an incision made to fit. The bark only is removed with the bud, no wood being allowed to adhere. The bud is set beneath the bark of the stock somewhat after the fashion of the shield bud, it being partly covered by the overlapping flaps of the bark of the stock. The bud is wrapped snugly with raffia, and the point of union then covered with grafting wax. The budding

is done in June on the Pacific Coast. The stocks are headed back about fifteen days after the budding, at the time when the bandage is cut. In cutting the stock, it is not removed entirely, but is cut on one side, broken down, and allowed to remain attached, in which position it aids in carrying off surplus sap, and prevents excessive sprouting from the roots. When the scion bud starts into active growth, the top should be removed entirely. After this is done, the growth of the bud is usually rapid, so rapid, in fact, that it will need staking in order to prevent breaking down under stress of wind and storm. A growth of four to six feet may be expected the first season.

FROST FIGHTING STUDIES IN THE ROGUE RIVER VALLEY

An interesting bulletin from the Oregon Agricultural College, by Prof. C. I. Lewis and F. R. Brown, covers the experience of two years in fighting frost in the Rogue River Valley. Among the conclusions reached by these workers are the following: Oils with a paraffin base are to be preferred to those having an asphalt base. Oil heaters alone were used. These were of the Bolton and Troutman types. These investigators recommend the use of cement storage tanks where large quantities of oil are to be stored, and galvanized tanks for small quantities. At thirty degrees atmospheric temperature, twenty heaters per acre had no influence in raising the temperature. Twice that number raised it one degree. It does not appear that less than one hundred heaters per acre is likely to be efficient in periods of distinctly cold weather.

The cost of heating an acre for a four hour period was \$5.10 for oil. This took no account of the cost of the equipment, but included labor and oil. The investigators conclude that there is no doubt that a crop can be saved by orchard heating. The experiments are to be continued.

"Severe frost and some two and one-half feet of snow have stopped Boskoop nurserymen from shipping stock to this country, which they had just started doing. Where most of the American firms have the bulk of their imports in Spring, it shows the advisability of having at least part come in Fall, especially those who have cellars should do so in order to have goods when they are wanted."

Boskoop.

KALLEN & LÜNNEMANN.

W. Van Kleef, Jr., of Boskoop, Holland, formerly with Messrs. W. Van Kleef & Sons, has dissolved his partnership with the above named firm and will continue the business relations on his own account from January 27th, 1912, under the name of Verkade Van Kleef, "Nova Nurseries," W. Van Kleef, Jr., Prop., at Boskoop. All orders will have his best personal care and attention.

Mr. G. W. Williams, formerly with Jackson & Perkins Co., of Newark, N. Y., but more recently with Swain Nelson & Sons Co., of Chicago, has entered into business relations with Maloney Bros. & Wells Co., wholesale and retail nurserymen of Dansville, N. Y., taking the office of secretary.

NATIONAL NURSERYMAN,
Rochester, N. Y.

Dear Sir:

Find enclosed \$1.00 P. O. money order, for which renew my subscription. I consider your journal a very valuable one.

Illinois.

CHAS. H. SLADEK.

Note and Comment

THE PARCEL POST SITUATION AT WASHINGTON

Early in January, I spent some time in Washington, attending hearings on Parcel Post before the Senate Committee on Post Offices and Post Roads, Jonathan Bourne, Chairman. I soon saw that great interests, well organized, were bringing powerful pressure to bear against a General Parcel Post law. The *Chicago Tribune* of December 21, 1911, reports that out of the 25,000 petitions received by Congress, over 99% oppose Parcel Post. Congressmen do not read agricultural papers; few farmers have appeared before the Committee and not many of them are writing letters favoring Parcel Post. The only well organized support steadily at work is the Postal Progress League of New York and Boston, James L. Cowles, Secretary, and the National Grange, Oliver Wilson, Master, Peoria, Illinois.

I believe the only way to get a general Parcel Post Law from the present Congress is to have the farmers from this time on pour in a steady flood of letters pleading for the measure.

Ten farmer-letters are worth a thousand petition-signatures; and if only two or three in a hundred write letters we will win, because of numbers. Let the agricultural papers keep on publishing Parcel Post matter, but always with the admonition *that the farmers write letters to their Congressmen*.

It is my opinion that Senator Bourne's committee will soon report out a new and most satisfactory General Parcel Post bill.

I have conferred with a number of agricultural editors who are personal friends, and they back up the plan of setting some day in March or April, to be called Farmers' Parcel Post Letter Day, on which day farmers will write letters to their representatives in Congress pleading for a General Parcel Post. With a steady inpouring of letters for the next couple of months, and then a *great final broadside*, we will win.

A word of personal explanation. A year of outdoor life on our Connecticut farm with my son had given back somewhat of old-time health and energy. I had planned to winter in the tropics. Witnessing the strenuous efforts of Senator Bourne and others in behalf of a General Parcel Post, I believed it my duty to join the movement and devote to it the money the trip would have cost.

W. A. HENRY,

College of Agriculture, Emer.Prof. of Agriculture.
Madison, Wisconsin, Feb., 1912.

THE PARCEL POST SYSTEMS OF SEVEN COUNTRIES

By W. A. HENRY, Emeritus Professor of Agriculture, Madison, Wis.

Practically every nation has a Parcel Post system.

The United States has the lowest weight limit for parcels carried by mail and the highest charge per pound of any country in the list. Our government makes a flat charge of 16 cents per pound for anything carried by Parcel Post, and limits the package to four pounds in weight.

Russia will carry packages up to 120 pounds, charging thirteen cents for two pounds and twenty-three cents for seven pounds. China, with a territory nearly one-half larger

than ours, carries four pounds for thirty cents and twenty-two pounds in one package for a dollar. To mail twenty-two pounds in this country we would have to put the material in six packages and pay \$3.52 postage.

Germany has the zone system, by which charges vary according to distance and weight. That country will carry an 11 pound parcel ten miles for six cents and to any post office in the empire for twelve cents.

More than a score of other nations could be added to the table, but enough has been given to show how antiquated our postal system is in the matter of transporting parcels for the people.

If you, reader, want a General Parcel Post write letters at once to your members of Congress telling them so. Oppose one cent letter postage until we have a General Parcel Post. Should your members of Congress, not hearing from you, vote against Parcel Post, do not find fault; for you have not done your part.

Remember, that March 18, 1912, is Farmers' Parcel Post Letter Day.

E. A. CHASE HONORED ON HIS EIGHTIETH BIRTHDAY

Riverside, California, now claims Mr. Ethan Allen Chase, formerly of Rochester, New York, as its citizen, and his face and name are well known to Southern Californians who are interested in the nursery and fruit industries. Thus, there was a large acceptance of invitations issued by Mr. Chase's sons to come to Riverside on January 18, for a joyous gathering on the occasion of the eightieth birthday of this respected citizen. Besides local friends, many guests from other cities in the southern part of the state were entertained. A banquet followed by a flag raising occupied the afternoon hours. The toastmaster was Harry Chase, who has recently returned from studying the orange industry in Spain. The first speaker introduced was Mayor Peters of Riverside, who spoke of Mr. Chase from an acquaintance of nearly twenty years. Many were the tributes paid by the speakers who followed to this octogenarian who has done so much for Riverside, though his residence there did not begin till he was more than sixty years old. Business men and personal friends alike gave voice to the fact that Mr. Chase is always willing to give of his time or his facilities for a worthy cause. As an instance of this, the opportunities which he provided for studying the problem of fertilization of orange groves were cited. Mr. Frost, a personal friend near Mr. Chase's own age, spoke in part as follows: "We have been congratulating Mr. Chase on this anniversary occasion, but the congratulations are really due to us. The congratulations are due the community that he has lived and worked here. We honor the man who makes two blades of grass grow where only one grew before; what then shall we say of the man who has made thousands of the most beautiful trees in the world grow where not one grew before?"

NATIONAL NURSERYMAN,

We take pleasure in handing you herewith draft covering our subscription to the NATIONAL NURSERYMAN to Feb., 1913. We consider the NURSERYMAN very helpful. Yours very truly,

Pa.

PENNA. NUR. Co.

LATEST REPORT ON SIMMONS BILL

EDITOR NATIONAL NURSERYMAN:

Dear Sir:

The present status of the Simmons bill is as follows:

Our Committee reached an agreement with the Department of Agriculture on several minor changes in the bill some time ago, and finally reached an agreement on the wording of the quarantine sections limiting their operation to insects and diseases new to or newly discovered in the United States.

On Monday of this week our Committee had a hearing before the House Committee on Agriculture, and at that hearing Mr. Harlatt of the Department of Agriculture reported the agreement made with the nurserymen, and recommended the passage of the bill as amended.

A strong delegation of California fruit people backed up by several California Members of Congress, made a very urgent appeal for more drastic legislation, advocating absolute power of quarantine and inspection at ports of entry.

It was quite evident that the sympathy of the members of the House Committee was not with the nurserymen, and while we presented our arguments, we were quite convinced that the Committee would not favor any bill leaving the quarantine sections to apply only to new insects.

After the hearing was concluded the whole matter was referred to a Sub-Committee with instructions to formulate a bill and report same to the full Committee.

A little later our Committee decided to say to Dr. Howard that in view of the situation and the evident inclination for more stringent legislation, that we had decided to stand for the printed wording of the quarantine sections number 8 and 9 of the bill as introduced in January, which would practically mean full quarantine powers both foreign and domestic, and urged the Doctor to secure if possible the approval of the House Committee to this proposition.

I have a letter this morning from Dr. Howard saying that the Sub-Committee has agreed to report the bill to the full Committee as suggested by the Department, and undoubtedly this recommendation will be adopted by the House Committee. It, of course, remains to be seen what action will be taken by the House and Senate.

The only changes in the printed bill introduced January 15th, of importance are the provisions for notice and hearing before any quarantine or radical action is determined on by the Commission, and Section 4 provides that the notifications may be sent to the state official whose duty it is to look after inspection at destination.

This bill, of course, is not what has been desired by our Committee, but a careful consideration of all the facts, circumstances, and opposition which developed at Washington, influenced us to believe that the time had come when it was necessary for us to join hands with the Department and agree to this bill in order to ward off something else that might be much more dangerous and burdensome, or in other words, it was in the judgment of our Committee the best that we could do under the circumstances, and if the measure is adopted by the House Committee and without further amendments, we shall feel that under existing conditions we were fortunate.

Yours truly,

WM. PITKIN, Chairman.

Feb. 23, 1912.

"We do not wish to have our adv run any longer. We sold all our Ibota Privet through it"

Texas.

G. VERHALEN.

We are grateful to the Revere Rubber Co. of Boston, Mass. for their 1912 calendar on which there appears a very appropriate colored illustration.

IMPORTS OF POTASH SALTS INTO THE UNITED STATES

The recent announcement by the Department of Agriculture and from other sources regarding discoveries of large supplies of potash in the United States lends interest to a statement prepared by the Bureau of Statistics, Department of Commerce and Labor, showing that the importation of potash salts is now running at the rate of over a million dollars a month and has aggregated since 1900 approximately 75 million dollars. While these potash salts enter the country in various forms and thus under various titles, including muriate of potash, sulphate of potash, carbonate of potash, kainit, etc., their aggregate import value in the 9 months ending with September, 1911, was eleven and one-half million dollars, against about seven million in the corresponding months of 1910 and a little over five million in the corresponding months of 1909, thus indicating a steady and rapid growth in the importation of this class of products. Taking the figures for fiscal years, the total for 1911 was fourteen million dollars, compared with less than twelve million in 1910, less than four million in 1900 and less than two million in 1890.

The principal classes of potash salts imported into the United States are, in the order of magnitude of imports in the fiscal year 1911: kainit, 1,300 million pounds; muriate of potash, 431 million pounds; sulphate of potash, 106 million pounds; carbonate of potash, 23 million pounds; nitrate of potash, or crude saltpeter, 9 million pounds; caustic potash, 7 million pounds; and all other salts of potash, 6 million pounds. Measured by value the largest importations during the year occurred in the muriate, 6½ million dollars; kainit, 2-3 million; the sulphate, nearly 2 million; and the carbonate, three-quarters of a million dollars.

American farms absorb a large proportion of the imported potash salts, most of which are valuable as fertilizers by reason of their large content of potash. This is especially true of kainit, muriate of potash, and the sulphate of potash. Nitrate of potash, or crude saltpeter, is chiefly used in the manufacture of gunpowder and nitric acid; caustic potash, in the manufacture of soap; and carbonate of potash, or "potash," as popularly called, obtained largely from the ashes of certain land and marine plants, is used in the manufacture of soft soap, for cleansing purposes, in dyeing, and for the emulsifying of oils; while the chemical and other industries utilize the foregoing and other potash salts in the preparation of drugs and medicines and in other technical processes.

Germany is the chief source of kainit and, indeed, of all the imported potash salts except crude saltpeter. Of the muriate imported in 1911, 431 million pounds, Germany supplied all except 3¼ million pounds received from Belgium and 1½ million pounds from the United Kingdom most of which was, in each case, presumably, of German origin. Practically all the imports of sulphate of potash are from Germany, and of the 23 million pounds of carbonate of potash imported in the last fiscal year, Germany is credited with 16 million pounds, compared with less than half that sum from all other European countries. In the case of nitrate of potash, or crude saltpeter, however, British India is the chief source, that country being credited with over 9 million pounds out of a total importation of 9¼ million pounds in the fiscal year which ended June 30, 1911.

C. R. Burr of C. R. Burr & Co., Manchester, Conn., called on his nursery friends in Rochester on his western trip, recently. Mr. Burr has a great many friends in the nursery business and they are always glad to see him.

John A. Cannady of Carrollton, Ills., had a fire which did \$10,000 damage to his nursery. The storage house and contents were destroyed. Insurance \$2,500.

NATIONAL NURSERYMAN:

Enclosed find \$1.00 for my subscription for 1912. Your paper is alright and fills its place perfectly.

Michigan.

C. L. BASHFORD.

CEMENT: PRODUCTION, IMPORTS AND EXPORTS

Cement of domestic production is supplying a rapidly increasing share of the growing consumption of that article in the United States and is, at the same time, becoming an important feature of the export trade. Figures compiled by the Bureau of Statistics, Department of Commerce and Labor, show that the production of cement, as reported by the Geological Survey, has increased from 760,000,000 pounds in 1880 to 3,040,000,000 in 1890, 6,555,000,000 in 1900, and 24,827,000,000 in 1909.

This increased production of cement in the United States has been accompanied by decreasing imports of that article from foreign countries. In the calendar year 1895, the imports of Roman, Portland, and hydraulic cement exceeded 1,000,000,000 pounds, the figures for that year being 1,199,000,000 pounds. By 1900, the total importation had fallen to 955,000,000 pounds; by 1905, it had further declined to 339,000,000 pounds, and in 1910, was but 117,000,000. Meantime exports of domestic cement were increasing, the total having advanced from 32,000,000 pounds in 1895 to 38,000,000 in 1900; 390,000,000 in 1905, and 941,000,000 in 1910. Thus, imports in 1910 were but one-tenth as much as in 1895, while exports of domestic cement in 1910 were thirty times as much as in 1895. The official figures of imports and exports for the first four months of the calendar year, 1911, reveal a continuation and, indeed, an acceleration of the tendencies above noted with respect to earlier years. Imports of cement during the four months, January to April, inclusive, decreased from 52,000,000 pounds in 1910, to 15,000,000 in 1911, and the value of the same, from \$182,000 to \$59,000. Exports of domestic cement, on the other hand, increased in the four months named from 254,000,000 pounds in 1910 to 394,000,000 in 1911, and the value from \$891,000 to \$1,482,000, or about ten times the quantity and six times the value of the exports in the full calendar year, 1900.

Germany is the chief source of cement imported into the United States. Of the 163,000,000 pounds of Roman, Portland, and other hydraulic cement imported in the fiscal year 1910, a total of 75,000,000 pounds was credited to Germany, compared with 48,000,000 pounds imported from Belgium, 16,000,000 pounds from Canada, 12,000,000 pounds from England, and 11,000,000 pounds from France; while small quantities were reported from Scotland, Japan, Austria-Hungary, Italy, and Netherlands. The other classes of cement have not yet become important factors in the import trade, their total value never having reached as much as \$200,000 in a single year.

Practically all the exported cement of domestic production goes to American countries and to the Philippine Islands. Of the 1,715,169 barrels exported in the last fiscal year, all Europe took less than 2,000 barrels, Asia but 120 barrels, Africa 95 barrels, the Philippines, 69,946 barrels, and Oceania exclusive of the Philippines, 916 barrels, the remainder having gone to various countries of North, Central and South America. The largest shipment was to Panama, presumably for use in the construction of the canal, 938,341 barrels. The next largest shipment was to Cuba, 335,695 barrels, against 86,338 barrels to Mexico, 65,142 to Chile, 53,253 barrels to Canada, and 35,251 barrels to Newfoundland and Labrador. The remaining countries to which exports in excess of 10,000 barrels each were sent during the year included Peru, 23,270 barrels; the British West Indies, 21,278 barrels; Haiti, 16,426 barrels; Santo Domingo, 13,159 barrels; Colombia, 16,228 barrels; Venezuela, 11,820 barrels; and Costa Rica, 11,058 barrels.

Catalogues Received

Stark Bros. Nurseries & Orchards Co., Louisiana, Mo. The Stark Orchard Planting Book.

Knight & Bostwick, Newark, N. Y. Sheet descriptive of K-B nursery stock.

Sutton & Sons, Reading, England. Sutton's Amateur's Guide in Horticulture for 1912.

Elmer D. Smith & Company, Adrian, Mich. Chrysanthemums and Asters, 1912.

De Graaff Brothers, Ltd., Leiden, Holland. Wholesale catalogue of bulbs and plants, 1912.

Huntsville Wholesale Nurseries, Huntsville, Ala. Price list, January, 1912.

August Rölker & Sons, New York. Price list of Holland grown stocks, August, 1911.

Royal Palm Nurseries, Oneco, Fla. Twenty-ninth annual catalogue, 1912.

R. & J. Farquhar & Co., Boston, Mass. Farquhar's Garden Annual, 1912.

The English Walnut Farm, Lockport, N. Y. "The Pomeroy English Walnut," with price list.

E. O. Painter Fertilizer Co., Jacksonville, Fla. Painter's Florida Almanac, 1912.

W. W. Thomas, Anna, Ill. "Pure Bred Strawberry Plants." Season, 1911-1912.

Henry A. Dreer, Philadelphia, Pa. Dreer's Garden Book, 1912.

J. M. Thorburn & Co., New York City. Thorburn's High Class Seeds, 1912.

Wm. Pfaender, Jr., (Pioneer Nursery), New Ulm, Minn. "Hardy Grapes for the Northwest."

The Winfield Nursery Company, Winfield, Kansas. "Pedigreed Trees."

John M. King & Sons, Coggeshall, Essex, England. Manual of Gardening, 1912.

The Griffing Brothers Company, Jacksonville, Fla. Price list of fruit trees.

Herbert Chase, Delta, Col. Price list of Chase trees for spring, 1912.

Vaughan's Seed Store, Chicago, Ill. Vaughan's Book for Florists, Spring, 1912.

The Whiting Nursery Company, Yankton, So. Dakota. Twenty-eighth Annual Catalog.

William Tricker, Arlington, N. J. Water Lilies.

L. J. Farmer, Pulaski, N. Y. Fall Bearing Strawberries, 1912.

Anthony Waterer, Knap Hill Nursery, Woking, Surrey. Catalogue of Hardy Trees, Shrubs, Conifers, etc.

Biltmore Nursery, Biltmore, N. C. Wholesale Trade List, 1912.

Appalachian Nursery, Spear, N. C. Price list.

W. Atlee Burpee & Co., Philadelphia. New edition for 1912 of Burpee's 35th Anniversary Supplement.

Lewis Roesch & Son, Fredonia, N. Y. Descriptive catalogue of grape vines, fruit and ornamental trees, shrubs, etc.

The Greening Nursery Company, Monroe, Mich. Catalogue for 1912, illustrated by a large number of colored plates.

The Leedle Floral Company, Springfield, O. "Roses and Roses," Spring, 1912.

Harrison's Nurseries, Berlin, Md. Mailing Card announcing "How to Grow and Market Fruit."

Blackmore & Langdon, Twerton Hill Nursery, Bath, England. Special Trade Offer of Begonia, Tubers and Seeds.

Kelway & Son, Langport, Somerset, England. Wholesale seed list.

Laxton Bros., Bedford, England. Special Offer of Fruit Trees.

Howden's Inverness, England. Special Wholesale Offer.

Willett & Wheelock, N. Collins, N. Y. Wholesale Price List.

Jackson & Perkins Co., Newark, N. Y. Wholesale Price List. Bulletin No. 1.

The Denver Nursery Co., Denver, Colo. Catalogue and Price List for Spring and Fall of 1912.

Olympic Nature Nursery, Joel Shomaker, Nellita, Wash. List of Wild Fruits, Flowers and Evergreens.

Arthur Bryant & Son, Nurserymen, Princeton, Ills. Surplus and Trade List.

The Northern Colorado Nursery Co., Loveland, Colo. Wholesale and Retail.

Yager Nursery Co., Fremont, Nebr. Spring 1912 Surplus List.

Harlan P. Kelsey, Salem, Mass. Catalogue of Rhododendrons, Azaleas, and other Hardy Native American Plants.

Peter Henderson & Co., Cortlandt St., N. Y. Garden Guide and Record.

The Globe Nurseries, Bristol, Tenn. Surplus List.

Kelly Bros., Dansville, N. Y. List of high class fruit trees.

D. Hill Nursery Co., Dundee, Ills. Wholesale Catalogue.

Richland Nurseries, Rochester, N. Y. Catalogue for Spring.

Goode & Reese Company, Springfield, Ohio. Spring Trade List.

Orchardists Supply Co., Newhouse Bldg., Salt Lake City, Utah. Wholesale Trade List.

Jewell Nursery Co., Lake City, Minn. Surplus list and Want List.

Harvard Evergreen Nurseries, Harvard, Ills. Wholesale trade list of Evergreens, Deciduous trees, etc.

Chase Bros. Co., Rochester, N. Y. Bulletin No. 2 Wholesale price list for Spring, 1912.

Evergreen Nursery Co., Sturgeon Bay, Wis. Catalogue and price list, wholesale and retail.

J. Jenkins & Son, Winona, Ohio. Wholesale price list of surplus stock.

Texas Nursery Co., Sherman, Texas. Wholesale Price List.

Ellwanger & Barry, Rochester, N. Y. Surplus list, Feb. 1st.

Bay State Nurseries, N. Abington, Mass. Wholesale price list of Trees, Shrubs, Evergreen, Vines, Roses and Herbaceous Perennials.

Griesa Nurseries, T. E. Griesa, Lawrence, Kans. Spring Trade List.

Southwestern Nursery Co., Okemah, Okla. Bulletin No. 1 for Spring, 1912.

F. H. Stannard & Co., Ottawa, Kans. Wholesale Trade List.

Glen St. Mary Nurseries, Glen St. Mary, Fla. "Mid-winter Circular, 1912."

W. N. Scarff, New Carlisle, Ohio. Semi Annual Surplus list of Choice New and Standard Bush Fruits.

I. E. Ilgenfritz' Sons Co., Monroe, Mich. Surplus list No. 1.

M. H. Harmon Company, Geneva, N. Y. General Catalogue.

Charlton Nursery Co., Rochester, N. Y. Wholesale price list.

A. Dallinges, Hardy Plant Specialist, Chene Bourg, Geneva, Switzerland. List of Seeds.

Biltmore Nursery, Biltmore, N. C. Wholesale Trade List.

Ellwanger & Barry, Rochester, N. Y. Wholesale Price List.

Stark Bros. Nurs. & Orchard Co., Louisiana, Mo. Condensed Stark Year Book.

Mt. Arbor Nurseries, Shenandoah, Iowa. Wholesale trade list.

Youngers & Co., Geneva, Nebr. Bulletin No. 2.

John Lewis Childs, Floral Park, N. Y. Condensed Catalogue of Novelties and Specialties in Seeds, Bulbs and Plants.

Kelway & Son, The Royal Horticulturists, Langport, England. A large and very attractive catalogue in gold and white entitled Kelway's Perennials for American Gardens. This book contains nearly two hundred pages of highly enameled paper, with illustrations profusely scattered throughout, also a large number of high class lithographs. Messrs. Kelway will be pleased to send this beautiful catalogue gratis and post free to any address brought to their notice by a customer.

Sherman Nur. Co., Charles City, Iowa. Surplus List.

James Vick's Sons, Rochester, N. Y. Wholesale price list.

James Vick's Sons, Rochester, N. Y. Garden and Floral Guide.

Storrs & Harrison Co., Painesville, O. Spring catalogue No. 2, also semi-annual price list No. 1.

Stumpp & Walter Co., 50 Barclay St., N. Y. Wholesale catalogue for the Florist and Market Gardener, for Spring, 1912.

Saddler Bros. Nurseries, Bloomington, Ills. Wholesale Catalogue.

P. D. Berry, Dayton, Ohio. Wholesale Price List of Small Fruit Plants, for Spring 1912.

J. E. Stoner, The Westminster Nursery, Westminster, Md. Price List for Spring, 1912.

Ralph M. Ward & Co., 71 Murray St., N. Y. "Horseshow Bulbology." An interesting booklet, which also contains a price list.

C. M. Hobbs & Sons, Bridgeport, Ind. Semi Annual Price List.

F. & F. Nurseries, Springfield, N. J. Spring Trade List.

Ornamental Nurseries, Painesville, Ohio. Trade List, Spring, 1912.

M. Crawford Company, Cuyahoga Falls, Ohio. Catalogue of Strawberry Plants and other small fruits.

Brown Bros. Company, Rochester, N. Y. Wholesale Price List for Spring, 1912.

W. B. Cole, Painesville, Ohio. Wholesale Price List.

Evergreen Nursery Co., Sturgeon Bay, Wis. Catalogue and price list, wholesale and retail.

The Ohio Nursery & Supply Co., Elyria, Ohio. Bulletin No. 1.

Huntsville Wholesale Nurseries, Huntsville, Ala. February Bulletin.

Harrison's Nurseries, Berlin, Md. Complete price list of all trees and plants corrected to December 1, 1911.

C. R. Burr & Company, Manchester, Conn. Special wholesale list.

W. W. Watson & Co., Topeka, Kans. Special Wholesale List.

Willis Nurseries, Ottawa, Kans. Trade list of Nursery Stock.

Geo. S. Josselyn, Fredonia, N. Y. Catalogue of American Grape Vines.

T. S. Hubbard Company, Grape Vine Specialists, Fredonia, N. Y. Wholesale Price List.

NATIONAL NURSERYMAN:

The advertisement stating my need for vines brought excellent results, and I secured a good supply. Enclosed find check.

Chicago.

FRED HAXTON.

SOME EXCITEMENT AT GEO. S. JOSSELYN'S

Undoubtedly, most all the nurserymen will remember seeing a picture of "a corner in Mr. Josselyn's den" which appeared in our December, 1908, number—this famous den, we are told by Mr. Josselyn, caused a lot of excitement which they are not used to, when it caught on fire on the morning of February 21st and at which time they had "a xxxx of a time to put it out." So the den is not inhabitable for some days and it will take some time to fix it up. We certainly are very sorry to hear of Mr. Josselyn's misfortune.

THE NATIONAL NURSERYMAN:

I enclose \$1.00 for renewal of my subscription for 1913. I do not wish to be without your journal as I find it quite instructive.

New York.

A. L. MILLER.

Mr. Atlee Burpee of Philadelphia, spent some time in February, at Oneco, Fla. Together with Mr. Chas. Greening they were entertained by Reasoner Bros. of the Royal Palm Nurs., Oneco, Fla. Mr. Greening is planning a winter home at Sarasota, Fla.

As long as I am in the business I want THE NATIONAL NURSERYMAN.
Vine Hill Nurs., Tex M. G. BLACK

Mr. E. D. Smith of Winona, Ont., is making a tour in England in the interest of canned goods. While there he expects to call on some of the prominent English exporters of nursery stock.

ROOT CUTTING BLACKBERRIES

2,000 Early Harvest
5,000 Erie

5,000 Eldorado
5,000 Mersereau

8,000 Ohmer
25,000 Snyder

W. B. COLE, Painesville, O.

WANTED

Man as correspondent in retail nursery office.
State experience, salary, etc.

Address "A", care of this paper.

AMERICAN ELM

Choice Trees From Young Blocks.

Special Prices on Request.

J. W. McNARY

Dayton, Ohio

Dayton and Xenia Nurseries

WANTED

Apple 1 and 2 years. Cherry 1 and 2 years.
Peach June Bud and 1 yr. Climbing
Roses, Ornamental Stock.

INTERNATIONAL NURSERY CO., Denver, Colo.

CATALPA BUNGEII SILVER MAPLES

W. B. COLE,
Painesville, O.

Olympic Nature Nursery THE FOREST CONSERVATORY

WILD FRUITS, PLANTS AND FLOWERS.

Blueberries, Blackberries, Raspberries, Salmonberries, Salalberries, Oregon Grapes, Rhododendrons, Ferns, Spireas, Trilliums, Evergreens and other native plants. Collected fresh from the forest. For sale or exchange. Catalogue on request.

JOEL SHOMAKER, Nellita, Washington

DOWNING GOOSEBERRIES W. B. COLE

Large Stock, 1 and 2 years

Painesville, O.

WANTED a position as Landscape Gardener. Would like charge of planting gang. Can draw plans. Will furnish references. Please state salary and character of work in first letter. "P. P. M." care NATIONAL NURSERYMAN.

STRAWBERRY PLANTS

Best varieties at reasonable prices. Also grape vine and other fruits
JOHN LIGHTFOOT, East Chattanooga, Tenn.

FRUIT TREES

FINE TREES
Prices Reasonable

APPLE AND PEACH.
LARGE STOCK.

Mitchell's Nursery, Beverly, Ohio

WANTED--Barberry Seedlings

Lots of 5,000 and up. Can use 50,000. Must be good. Also can use a few thousand bushy 2 to 2½-ft. stock. Quote price packed and f. o. b.

FRED HAXTON, 4717 Winthrop Ave., Chicago.

FOR SALE

Well established nursery consisting of about 30 acres of growing stock and equipment, located near Indianapolis, Ind. This location offers a splendid opportunity to the right party, to operate as an individual or branch nursery. For further information and terms write W. C. H., care NATIONAL NURSERYMAN.

AMERICAN RED OAK

We have in surplus several hundred thousand RED OAK seedlings, 6 to 12 inches and 12 to 18 inches for fall or spring shipment. Let us quote you prices and send samples.

The D. Hill Nursery Company, Inc.

Evergreen Specialists

Box 843, DUNDEE, ILL.

GRAPE VINES

We offer for Fall and Spring delivery the largest and most complete stock of GRAPE VINES in strong grades for nurserymen and dealer's trade.

We also have an extra fine block of President Wilder currants which have made a strong growth.

SEND LIST OF YOUR WANTS FOR PRICES

T. S HUBBARD COMPANY

Established 1866

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CATALPA SEED

FOR SALE: genuine Catalpa Speciosa seed from Wabash Valley.

W. E. ENSOR, Boonville, Ind.

WANTED

Nurseryman to take the position as foreman to superintend the planting out and care of stock in the nursery. Must be familiar with varieties of trees and shrubs, and have worked before in a commercial nursery. Apply by letter, giving experience.

LEWIS VALENTINE & COMPANY,

East Rockaway, Long Island, N. Y.

Peach Trees

and Strawberry Plants

all leading market sorts for Spring, 1912

MYERS & SON, Bridgeville, Del.

A BARGAIN

IN STANDARD PEARS

Extra size, 6 to 7 ft.; 1 inch and up 5 to 6 ft.; 3-4 and up. Mostly Bartlett.

Can also furnish a few of the leading varieties.

It will be worth while to get our prices before buying elsewhere Address,

PIONEER NURSERIES COMPANY,

Salt Lake City, Utah.

HIGHER GRADE NURSERY STOCK

¶In storage, ready for shipment, on one day's notice, with the exception of Shade Trees which will be dug from field. ¶Our manner of propagation gives individuality to stock which we offer. ¶Graded clear of Root Knot, Gall, Hairy Root and crooked or undesirable trees. ¶Peach Trees staked in bud, giving symmetrical straight trees. Fine roots budded on natural pit seedlings. ¶Shade Trees transplanted at one year to make root system. Cut back after one-year growth to make quick, smooth straight bodies. ¶Catalpa Speciosa of our well-known reputation of fine plants from pure seed.

APPLES

	2-yr. 3-4 ft.	2-yr. 4-6 ft.	2-yr. 4-5 ft.	2-yr. 3-4 ft.	2-yr. No. 1 2-3 ft.	1-yr. 3-4 ft.	1-yr. 2-3 ft.	Buds 1-yr. 3-5 ft.	Buds 1-yr. 2-3 ft.	Buds 1-yr. 1-2 ft.
Arkansas Black.....	666	363	322	247	167			117		
Gano.....	5428	5505	3926	3512	1565	1547	42420			
Grimes' Golden.....	54	2175	1295	143		1223	94			
Jonathan.....	8523	12670	8231	5058	4469	2762	1474	1185	1824	540
Maiden Blush.....	6	452	333							
Mammoth Bl. Twig.....	1640	1488	290	447	256	922	184			
McIntosh Red.....	281		562	406	220	547	321	1611	300	100
Missouri Pippin.....	927	302	370	240	360	401	148			
Newtown Pippin.....	132	65	187	180	80	1049	252	325	360	220
Ragan.....	6342	3136	3278	1561	1754	1515	548	2886	793	
Rome Beauty.....	2916	1380	1784	998	811	531	346	1150	695	
Spitzenburg.....	443	587	515	396	510	328	103	895	340	127
Stayman Winesap.....	1789	3033	785	623	430	3618	932			
Winesap.....	2629	2788	3936	2921	1790	3908	1968			
W. W. Pearmain.....	2811	1234	642	531		39	25	530	252	80
York Imperial.....	599	255	227	253	199	42	190			

ORNAMENTAL TREES

Bungei Catalpa.....	600
---------------------	-----

SHADE TREES

	10-12 ft.	8-10 ft.	6-8 ft.	4-6 ft.	4-5 ft.	3-4 ft.
Catalpa.....				598		31268
Elm.....	298	2407	7337	10445		
Locust.....	92	759	4625	6442		2000
Soft Maple.....	294	237	209	2400		245
Poplar.....	442	148	50	131		
Box Elder.....			52	249		48
Maple Cut-leaf.....			24	90	46	
Russian Olive.....					48	107

PEACHES

	1st cl. 3-4 ft.	1st cl. 4-6 ft.	4-5 ft. ½-¾	3-4 ft. 1-yr.	2-3 ft. 1-yr.	18-24 in.
Blood Cling.....	20	228	208	301	298	140
Elberta.....	7437	962	13981	3033	1188	
Orange Cling.....		31	152	197	100	
Elberta H.....	1265	1234	4757	5110	5283	
Phillips Cling.....		72	203	269	418	

PEARS

	3-4 ft.	2-yr. 5-6 ft.	2-yr. 4-5 ft.	2-yr. 3-4 ft.	2-3 ft.
Bartlett.....	1271	1829	506	722	
Keiffer's Hybrid.....	470	4840	4606	2745	1734

CHERRIES

	3-4 ft.	2-yr. 4-6 ft.	2-yr. ½-¾	2-3 ft.
Early Richmond.....	100	1070	1206	204
Montmorency.....	377	768	2074	580
Royal Duke.....	1072	3080	310	553

FOREST TREE SEEDLINGS

	2-3 ft.	18-24 in.	12-24 in.	12-18 in.	8-12 in.	6-12 in.
Catalpa.....	173390		142756		40645	42000
Russian Mulberry.....		6900		7500		

NOTE:—Can quote low price on clean stock of slightly crooked grade o stock marred by broken root in peach or apple.

THE WINFIELD NURSERY CO., Winfield, Kansas

J. MONCRIEF, President

APPLE, PEAR, PLUM, CHERRY SEEDLING STOCKS AND ROSA CANINA

Grown by DOORNBOSCH & SON, *Seedling Specialists*, Veendam, Holland, *are second to none.*

We are now booking, at special quotations, contract orders for 1912-13 delivery. Contract orders are open until February 15, 1912. Get our prices, they are reasonable.

THE HORTICULTURAL CO., Worcester, Mass. SOLE AGENTS FOR DOORNBOSCH & SON Veendam, Holland

We still have a few apple seedlings on hand of 5-7 mm, 7-10 mm, and 7-12 mm. GET OUR SAMPLES.

ROSES

OLD TRIED
NEW TRUE

Booking orders for
spring planting.
225 Varieties

THE LEEDLE FLORAL COMPANY®
SPRINGFIELD-OHIO.

A SOUTHWESTERN DIRECTORY of the Nurserymen and Florists of Texas and Oklahoma. Over five hundred names and addresses revised in 1911.

There is also included the Eleventh Annual Report of The Texas Nurserymen's Association.

Mailed to any address for \$2.00.

JNO. S. KERR, Secretary, Sherman, Texas

WE ARE way ahead of last year in the volume of our collection business; but still we can do yet more. Do not wait but send us now all your back accounts. Rates and methods on application.

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56 Pine Street, NEW YORK

Native Plants and Trees in Carload Lots

Rhododendron Maximum, Kalmia Latifolia (Mountain Laurel) Azalea
Nudiflora, Hemlocks, Pines and Ferns, all sizes.

C. G. CURTIS, Grower and Collector

Callicoon, Sullivan Co., N. Y.

WANTED

A competent and experienced man to manage retail nursery business for established firm. Good pay and opportunity to advance for right man. Give reference. Address "B", care of NATIONAL NURSEYMAN.

APPLE SEEDLINGS

A few thousand extra size Vermont grown seedlings—from native seed. Prices right.

F. H. McFARLAND, Lamoille Co., Hyde Park, Vermont

Strawberry Plants

I have millions of them. Wholesale price list free.
Thirty-two years growing good plants.

J. A. BAUER, Judsonia, Ark., Box 9

TREE SEEDS

Large assortment of Tree, Shrub and Fruit Seeds for ornamental and forestry purposes. Send for catalogue.

CONYERS B. FLEU, Jr., GERMANTOWN,
PHILA.

BOX STRAPS

AND CAR SEALS

WARD-DICKEY STEEL COMPANY

Manufacturers of Planished Sheet Steel
INDIAN HARBOR, IND.



Fall Bearing Strawberries

These Berries are truly wonderful. They bear fruit every fall as well as spring, three crops in two years. They have yielded as high as 10,000 qts. to acre in Aug., Sept. and Oct. of first year, with us. We cannot get enough fruit to supply the demand at 25c per qt. wholesale. I know of nothing in the fruit line quite so profitable. We are also headquarters for Plum Farmer, Idaho and Royal Purple Raspberries, Early Ozark Strawberry, Watt Blackberry, Hastings Potato. Catalogue of all kinds of Berry Plants free. Address

L. J. FARMER, Box 283, Pulaski, N. Y.

Surplus Cuthbert Raspberries

Large, heavy rooted bushes from new set fields.
Prices on application.

BERT BAKER, Hoosick Falls, N. Y.

100,000 Marlboro Red Raspberries

Good Stock from Young Fields guaranteed true to name. Free from disease. Prices on application.

SHARON NURSERIES, Sharon Springs,
N. Y.

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High Grade Nursery Stock RICHMOND, VA.

Offer for Spring 1912: Peach, Pear and Cherry, 1 and 2 year; Pear Seedling. Also California Privet, 1 and 2 yr.; extra fine. Send us your lists for quotations.

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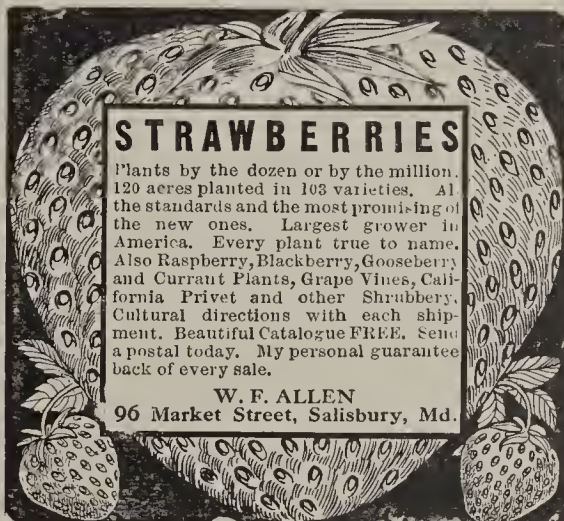
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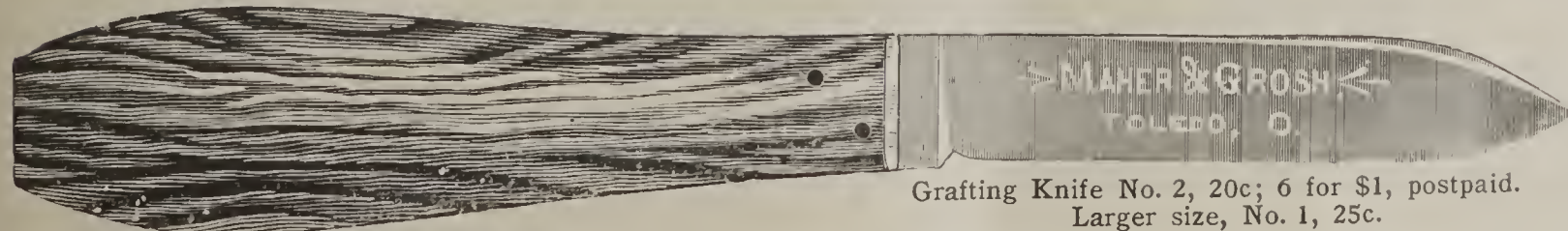
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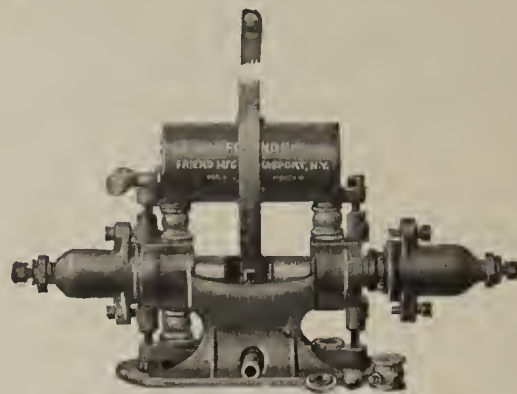
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FUNGOUS DISEASES OF PLANTS

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Professor of Plant Physiology in Cornell University

This book is designed to serve as a substantial reference book and is the result of special experience in the study of the practical aspects of plant pathology. There is a comprehensive discussion of the chief fungous diseases of cultivated and familiar plants.

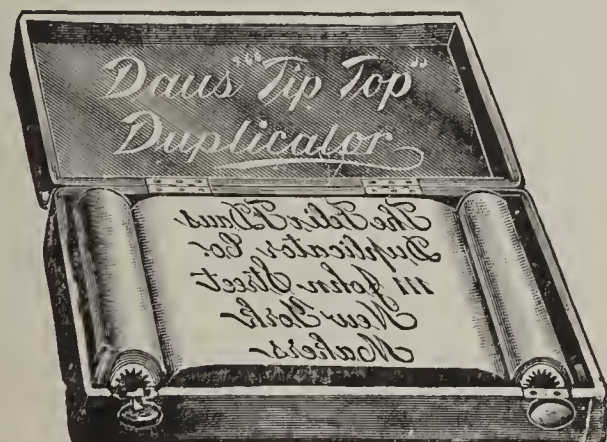
Each disease is discussed with reference to its occurrence, the nature of the lesions or processes induced, the structure, life history, and cultural relations of the casual fungus, and practical methods for prevention or control.

The literature of the subject is freely cited, and a host index provides a ready reference to all of the important fungous diseases occurring upon any host. The method of treatment followed is intended to facilitate and stimulate the work of the nurseryman and practical fruit grower and to enlarge the interests of the general reader. The book is very fully illustrated from photographs and from drawings especially made for this work.

8 vo. 508 pages, Illustrated. \$2.40. Trade Edition.

Sent on receipt of price by

THE NATIONAL NURSERYMAN PUBLISHING CO., 218 Livingston Building
ROCHESTER, N. Y.



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"Modern Methods of Harvesting, Grading and Packing Apples" is a book that should be in the hands of every orchardist who is desirous of getting the highest possible price for his apples. It illustrates and describes the Western methods of fruit packing. The fruit grower of the East is greatly indebted to his Western brother for showing him the great possibilities that lie in the fruit business, and if, with the great natural advantages of soil, rainfall and close proximity of market, he does not profit by this example, he has no one to blame but himself. A postal request to Dept. "B" will bring you by return mail, free, the above book and new booklet, "Sealeeide—the Tree Saver." If your dealer cannot supply you with "Sealeeide" we will deliver it to any railroad station in the United States east of the Mississippi and north of the Ohio rivers on receipt of

the price. 50-gallon barrels, \$25.00; 30-gallon barrels, \$16.00; 10-gallon cans, \$6.75; 5-gallon cans, \$3.75.
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50 Church Street, New York City

When writing to Advertisers please mention The National Nurseryman

1912 Fruit Tree Orders Coming in Right Along—May We Fill Yours?

By all the signs, 1912 is going to be a big year in fruit tree selling. Men who grow fruit and nothing else are buying more trees, and then there's a big increase in orders from farmers who want to grow more fruit as a side line and for home use.

YOU will get the benefit of many of these orders this spring if you have the trees with which to fill them. If you haven't grown them yourself we will supply you with first-class stock grown here at Berlin in this mild, genial climate with its long growing season, and in our loose, rich soil that makes such splendid roots. We have specially fine stocks of

KEIFFER PEAR
ELBERTA PEACH
CONCORD GRAPE

EARLY RICHMOND CHERRY
ONE- AND TWO-YEAR APPLE
STRAWBERRY PLANTS

AND A SPLENDID LOT OF ORNAMENTALS:

NORWAY SPRUCE
NORWAY MAPLE

KOSTER BLUE SPRUCE
SILVER MAPLE
CALIFORNIA PRIVET, ETC.

Following is a partial list of varieties and sizes. We have a bulletin here for you showing just what we have to offer, with prices. Shall we send it?



This is the kind of growth that our peach trees make, when given the right show.

LIST OF SURPLUS STOCK SUBJECT TO IMMEDIATE ACCEPTANCE

APPLES

	2-Year					1-Year				
	1 in.	6-7	5-6	4-5	3-4	2-3	5-6	4-5	3-4	2-3
Aiken Red							100	139		
Apple of Commerce							100	100		
Arkansas Blk.							296	45	199	
Baldwin							10000	15000	10000	8000
Benoni							25	50		2870
Ben Davis	476	2020		200	50		3811	4831	2349	275
Canada Red							48	50		300
C. R. June		74	108	70			800	600	298	
Carthage		200	300				60	70		
Coffelt Beauty		290	100				100	75		
Coopers' Market		450	100				150	100	50	
Dominie		195	100				200	100	100	
Ea. Harvest		607	417	590	220	100	2895	4902	1998	400
Early Melon							48	60	40	
E. Strawberry		90	99				48	190	199	
Ensee		300	299	300	100					
Fallawater							198	999	994	500
Fall Pippin							316	192		
Fanny		300	100				120	230		
Flora Belle							60	30		
Fourth of July		280	380	120	40		200	399	200	
Gano							998		380	400
Golden Sweet							98	199	94	
Gravenstein							1000	1000	1000	
Gravenstein								1000	1000	200
Grimes' G'd'n	477						1200	1200	3000	873
Hubbardston							2880	3021	2400	360
Ingram		210	300				100	300		
Jeffries		230	108	10				50		
Jonathan							3000	8000	1988	3600
Kennard's										
Choice		400	100				160			
Lankford	20	100					98	100		
L. Raspberry		180	60	50			98	100		
Lawver		220	90				160	99		
Limburtwig		300	300				350	200		
Longfield			50				80	60		
M. B. Twig		3000	409						48	1199
Mann		385	150				600	500	190	820
Mo. Pippin		106					450	1490		
Myrick		400	100	100			160	80		
Nero		108					4906	6919	865	400
N. W. Greening		338	390				1500	2000	3000	1480
P. W. Sweet	25		250				300	552	400	95
P. L. Keeper		220	70	10			40	100		
Pewaukee		310	100				100	100		
Rawles Janet		190	25							
Rambo		110	10				496	468	490	
R. I. Greening							1200	1500	993	
Red Astrachan		276	1994	1984			1500	2000	1500	1000
Rolfe		140	200							500
Roman Stem							59	90		
Rome Beauty								2000	1000	278
Salome		70	200	200			50	40		

APPLES—Continued

	2-Year					1-Year				
	1 in.	6-7	5-6	4-5	3-4	2-3	5-6	4-5	3-4	2-3
Senator		80	100				48	50		
Smith Cider		40	10				490	496	96	
Spitzenburg		448	500				1500	2500	1000	500
Springdale		220	30				10	80		
Stark		165	3235				5000	1200	430	285
Stayman's							1000		1000	2000
Strawberry										1500
(Chen.)		150	50				93	100		
Sweet Bough		25	280				600	394	198	
Tallman's Sweet								493	300	100
Townsend							100	99		
Virginia Beauty							30	40		
Walbridge		300	100				190	100		
Wealthy									1000	1500
Wm. E. Red									800	600
Winesap		1500	1500				2000	2000	3000	1330
Winter Banana		604					1500	500	430	1440
Wolf River		320					2500	1500	940	350
Yel. Trans		1000	4000	2500	2500		5000	5000	2500	3534
Yel. Belleflower			70				500	481	145	848
York Imp.			5000	5000	5000	2000	1500	10000	10000	7000

CRAB APPLES

Golden Beauty		300	150		1000	997	1000	500	500	
Hyslop	5		36	10	415	998	895	500	500	
Martha		265	200		55	158				
Transcendent		2294	2000	1000	1000	1998	893			

PEACHES

	2-Year					1-Year				
	1 in.	6-7	5-6	4-5	3-4	2-3	5-6	4-5	3-4	2-3
Albright October		40	60	60	40					
Amsden June		30	30	30	30					
Apex					500	100				
Arkansas Beauty			30	40	37	15				
Belle of Georgia			1500	1500						
Bokara			60	50		17				
Brandywine			30	30	20	20				
Bustan's Oct			40	40	40	30				
Carman			2000	4000	1000	216	445	990		
Champion			293	500						
Chilow Cling			20	20	20					
Chinese Cling			50	39	49	20				
Cobbler			40	37	40	27				
Cornelia			70	70	70	40				
Connetts S. Early			60	350	10	277	280	190		
Crawford Early				500						
Crawford Late			500	1500	500	1500	1000	1000		
Denton				200	160	200				
Early Elberta			30	30	30	10				
Early Michigan			50	50	50					
Early River			20	60	18					
Early York			30	5	18					
Easton Cling			30	30	30	30				
Elberta			9900	25000	35000	30000	30000			
Elberta Cling			30	38						

Harrison's Nurseries
J.G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

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THE NATIONAL NURSERYMAN



APRIL, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.

MONROE, MICH.

MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

Complete line General Nursery Stock for whole-
sale trade. Unsurpassed storage facilities.

Large stock in storage, free from winter injury.

APPLE, CHERRY, PEACH, BARTLETT and B. deANJOU
PEAR, BLACKBERRIES, root cutting plants, CURRANTS,
GRAPE VINES, CAROLINA POPLAR, ELM, SILVER
MAPLE, CALIFORNIA PRIVET.
ROSES. APPLE GRAFTS. APPLE SEEDLINGS.

ASK FOR SPRING TRADE LIST

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SPIRAEA VAN HOUTTEI
by the thousand.

Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

1,000,000 POPLAR

Norway and Carolina

We offer this year the largest stock of northern-grown
Poplar, Box Elder, Soft Maple and other hardy shelter
belt stock to be found in the country.

A fine stock of **ONE-YEAR APPLE**, said to be one
of the best stands in the country this year, McIntosh,
Jonathan, Rome Beauty, etc., etc.

Write us for prices on carload lots.

The Jewell Nursery Co.

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

BAY TREES



STANDARD.

For landscape work, summer decorations and formal garden-
ing **Bay Trees** are indispensable. They are shipped in tubs—
all ready for use.

Shipments arrive from Belgium during April, so it is too
late to book further orders for Spring importation, but if you
write us your requirements we will refer your inquiry to the
importer nearest to you who bought our Bay Trees, and who
will quote you delivered prices on what you require. We are
delivering many earloads, distributed from Maine to Oregon.

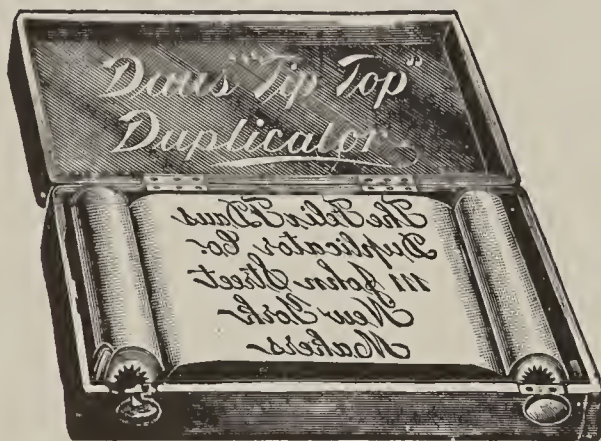
Our Booklet "Just Bays" illustrates all commercial sizes
and shapes.



PYRAMID

McHUTCHISON & CO., THE IMPORT
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17 Murray Street, New York City



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NOTE THE SIMPLICITY

OF MAKING PERFECT DUPLICATES WITH THE

Daus Improved Tip Top Duplicator

No intricate mechanism. No printers' ink. Always ready. **100 copies from Pen-written and 50 copies from Typewritten originals.** Useful in any business for making duplicates of circular letters, trial balances, invoices, price lists, reports, menus, manuscripts, drawings, specifications, etc., etc.

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Our negative rolls now have our new "Dausco" Oiled Linen Back,
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Prints 8¾ x 13 inches - - -

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Up-to-date Fruit Growers

Many good apple growers are using Lime-Sulfur, but the most up-to-date growers
in the United States, Australia and Africa use "Scalecide"—not because somebody
else is using it, but their own judgment and experience tells them that the greatest
perfection in fruit and foliage is produced by the continued use of "Scalecide,"
with less labor and less expense. "Scalecide" has no substitute. It is the only
oil containing distinct fungicidal properties. Write for proofs. One barrel of
"Scalecide" will spray as many trees as 3½ barrels of the best commercial Lime-
Sulfur, and do the work much better. A postal request to Dept. "B" will bring
you by return mail, free, our book, "Modern Methods of Harvesting, Grading and
Packing Apples," and new booklet, "Scalecide—the Tree-Saver." If your dealer
cannot supply you with "Scalecide" we will deliver it to any railroad station in
the United States east of the Mississippi and north of the Ohio rivers on receipt of price. 50 gals., \$25.00; 30 gals.,
\$16.00; 10-gal. cans, \$6.75; 5-gal. cans, \$3.75. Address,

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NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the
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Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and
Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms
and other tender Greenhouse Plants

Have a large stock stored in frost proof cellars that can be shipped at any time desired;
switch from N. Y. C. lines direct into our packing house; can load without exposure.
Unsurpassed facilities for handling orders large or small. Catalogs and price lists free.

A few specials while they last:

STANDARD PEARS in assortment DUCHESSE DWARF PEARS BOURGEAT QUINCE
PRUNUS PISSARDI and TRILOBA CUTHBERT AND OTHER RASPBERRIES
CONCORD AND OTHER GRAPES



WEeping MOUNTAIN ASH

Our Specialties are: Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

AMERICAN

ELMS...

SPLENDID TREES

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

ANNOUNCEMENT

January Bulletin has been mailed to the trade. Those entitled to receive a copy should insist on having one. It will be mailed cheerfully and promptly on receipt of request. The Bulletin shows what we have to sell this Spring and includes some attractive offers of STANDARD and DWARF APPLES, QUINCES, PEACHES and other fruit trees: small fruits and a fine lot of ornamentals like TREE HYDRANGEAS, TREE LILACS and other flowering shrubs in standard form: ROSES—our long suit—including some especially fine Crimson Rambler, Baby Rambler, Blue Rambler, White Dorothy Perkins, H.Ts, H.Ps—in short lots of good things. Also APPLE SEEDLINGS, in all grades, and FRENCH and VERMONT APPLE SEED. This is quite a lot of talk to put into so small an amount of space, but we have lots of things to talk about. Buyers are invited to tell us their wants and we will talk to the point with attractive prices on the goods known very generally as "THE PREFERRED STOCK."

JACKSON & PERKINS COMPANY

"Purveyors to the Trade"

NEWARK, Wayne Co., NEW YORK

February 1st

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's worth it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.
INCORPORATED

Fruitland Nurseries
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.

CONIFERS
BROAD-LEAVED
EVERGREENS
DECIDUOUS
SHRUBS
WEEPING
MULBERRY
PEACHES
OTHER FRUITS



Biotia Japonica Filiformis.

The Best Tree Digger on Earth



Used and Recommended by Leading Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.

LOUISIANA, MO.

It would be mighty easy to grow "Hill Quality" evergreens by letting them stand in the same beds where we sowed the seed, but such stock as we pride ourselves on doesn't come that way.

Our method is to transplant frequently, starting with the time the little fellows are hardly bigger than grass-blades—and you ought to see the roots such a tree develops! The intelligent care that

Hill's Transplanted Young Evergreens

get in their "early childhood" makes them a valuable proposition for you if you are doing any business at all in evergreens or want to begin. We are Evergreen Specialists, as you'll promptly realize when you see our big Nurseries practically given to this one thing.

We have been at it for over fifty years; we have particularly good facilities, and we specialize on seedlings, and young transplants for nurserymen's and dealers' use, lining out, etc. There's an increasing demand for this sort of stock, and it will pay you to look into it. Write us about your wants, and get our Catalog.

THE D. HILL NURSERY CO., Inc., Evergreen Specialists

D. HILL, President

Box 401, DUNDEE, ILLINOIS

LARGE SURPLUS

APPLE

GRIMES GOLDEN
INDIAN
JONATHAN
M. BLUSH
N. W. GREENING
PEWAUKEE
RAMBO
ROME BEAUTY
STARK
STAYMEN'S W. S.
TULPEHOCKEN
WINESAP
YORK IMPERIAL

PEACH

CARMAN
CHAMPION
EARLY CRAWFORD
LATE CRAWFORD
O. M. FREE

PLUM

BURBANK
ABUNDANCE
MOORE'S ARCTIC
REINE CLAUDE
SHIPPER'S PRIDE

CHERRY TREES

FOR SALE IN CARLOAD LOTS

MONTMORENCY
BALDWIN

E. RICHMOND
DYE HOUSE

ENG. MORELLO

APPLE SEEDLINGS
STRAIGHT ROOTS

$\frac{3}{16}$ -in. up.
Price very reasonable

C. M. HOBBS & SONS
BRIDGEPORT, : : INDIANA

Jonathan

Gano

Ben Davis

AND OTHER LEADING SORTS IN CARLOAD.

Fine assortment of Apple in 2-year Grafts and 1-year Buds.

CHERRY, $\frac{1}{2}$ inch up; $\frac{3}{4}$ to 1 inch; $\frac{5}{8}$ to $\frac{3}{4}$,
and all under grades.

KIEFFER-GARBER, and assorted pear in
all grades.

A carload of $\frac{3}{4}$ foot, 2-year, California Privet at a bargain. This is a fine lot.

TEXAS UMBRELLA TREE--

CATALPA SPECIOSA,

in large quantity, 4 to 6, 6 to 8, 8 to 10.

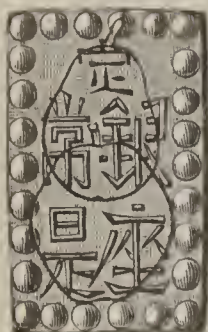
If you don't receive our January Surplus List ask for it.

WAXAHACHIE NURSERY CO.

J. R. MAYHEW, President

WAXAHACHIE, TEXAS

Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Spring of 1912 in large quantities as usual:

SPECIALTIES

APPLES—Commercial varieties, one year, in large supply. As fine in quality as ever grown.

PEARS—Kieffers, one and two years old. A much smaller crop than heretofore.

CHERRIES—On Mazzard. One year. Bing, Lambert, Napoleon, Black Tartarian.

CHERRIES—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

ROSES—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

PRIVET—Amoor River. Retains its foliage longer and holds its color better than California Privet.

MAGNOLIA G. F.—Huntsville grown. Handsome, young plants, transplanted.

See Price List for particulars.

Address, T. J. O'HARA, Manager,
HUNTSVILLE, ALA.

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,
in several hundred
kinds and varieties

ROSES, in all kinds
and varieties

RHODODENDRONS, Hardy,
ENGLISH HYBRIDS,
Maximum and Catawbiense

BOXWOOD, in all shapes,
forms and sizes

HARDY AZALEAS, in all
colors and varieties

HEDGE PLANTS, in all
popular kinds

FLOWERING SHRUBS, in
bush and standard forms
in hundreds of kinds
and varieties

SHADE TREES, in hundreds
of useful and attractive
varieties

MAGNOLIAS and other
FLOWERING TREES

WEeping and STANDARD
TREES, in many varieties

JAPANESE MAPLES, in all
varieties and colors

HARDY TRAILING VINES
and CLIMBERS

HARDY VINES and CLIMBERS
in pots

SPRING and SUMMER
FLOWERING BULBS, ROOTS
and PLANTS

PALMS and BAY TREES by
the thousands

FRUIT TREES,
home-grown, imported,
DWARF and TRAINED

SMALL FRUITS, in all
kinds and varieties

NUT TREES, profitable
kinds

OLD-FASHIONED, Hardy
FLOWERING PLANTS, in
thousands of kinds and
varieties

PAEONIAS, IRIS, PHLOX
FERNS,
and HARDY GRASSES

KITCHEN
HERBS and ROOTS

RUTHERFORD PARK LAWN
GRASS SEED

AUTUMN BULBS, Dutch,
French and Japanese kinds

Interior and Exterior
DECORATIVE PLANTS, in
a large variety

PLANT TUBS, in all shapes and
sizes. Ask for special list

VISITORS to our nurseries
are always welcome

SEND IN YOUR LISTS FOR
QUOTATIONS

Nurserymen, Florists and Planters
RUTHERFORD, N. J.

SMALL STOCK

FOR PLANTING
IN NURSERY ROWS

We have a large assortment of this stock to offer this year. It is all first class stock that will give the best results to the planter. Our list, showing varieties and prices has just been issued. Send for a copy at once. It will interest you.

We can also offer French Crab Apples, Kieffer Pear, Mahaleb Cherry and Quince Seeds and a complete list of Tree and Shrub Seeds. A limited supply of Apple, Pear, Cherry, Plum and Quince Seedlings remaining. Send for lists and prices.

THOMAS MEEHAN & SONS

Wholesale Nurserymen and Tree Seedsmen

DRESHER (near Philadelphia) PA.

THE HIGHWAY TO PERENNIALS

Leads straight to the

Palisades Nurseries

THERE you will find all kinds and you can take your pick from the best that grow. We are headquarters for perennials and assure the widest latitude in choice as well as the most courteous promptitude in correspondence and service. Our motto—Maximum Quality at Minimum Cost.

WRITE

The Palisades Nursery

SPARKILL, N. Y.

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Berberry Thunbergii Seedlings

Place your order now for next season's delivery, then you are sure to get the best. : : : : : : : :

On Other Stock

Watch our Bulletins issued frequently during the shipping season. Some choice varieties offered at low market prices. : : : : : : : :

C. R. BURR & CO.

Manchester, Conn.

DREER SPECIALTIES

HARDY PERENNIALS. A most extensive assortment and an immense stock of the leaders, such as Anemone Japonica, German and Japanese Iris, Hardy Phloxes, Pæonies, etc.

AQUATIC PLANTS. Nymphæas, Nelumbiums, Victorias, etc. Over seven acres devoted to water gardening.

ROSES. Three hundred thousand field-grown plants, now in 5 and 6-inch pots. We are particularly strong on the now so popular Hybrid Tea Roses and carry the most extensive assortment.

DECORATIVE PLANTS. Palms, Ferns, Araucarias, Pandanus, Store and Greenhouse Plants. Nearly seven acres of glass devoted to this class of stock.

BULBS. Dahlias, Gladiolus, Caladiums, Lilies, etc., etc.

HARDY SHRUBS. Rhododendrons, Azaleas, Deciduous Flowering Shrubs, Hardy Vines and Climbers, etc., etc.

BOX WOODS AND BAY TREES. A splendid lot of commercial sizes, of various forms of exceptional quality.

All the above, as well as a full line of other seasonable plants, seeds and bulbs, are described in our Current Wholesale List which we shall be pleased to mail to those in the trade upon request. If you do not receive it regularly write.

HENRY A. DREER

714 Chestnut Street

PHILADELPHIA, PA.

FOREST TREES FRUIT STOCKS

Shipments of over 200 Million of
Trees Annually

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J. HEINS' SONS

HALSTENBEK, No. 152

Near Hamburg, Germany

Largest Forest Tree Nurseries in Europe.

Please write for Catalogue and Forest Planter's Guide to our American Agent:

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287 Broadway
NEW YORK CITY

EVERGREEN SEEDLINGS

FOR SPRING SHIPMENT we offer a large stock of all leading varieties, grown in soil to develop extra stocky, well rooted seedlings. Orders filled with plants dug fresh and shipped the same day. : : : : :
Spring price list now ready.

R. DOUGLAS' SONS

ESTABLISHED 1848

Waukegan Nurseries

Waukegan, Ills.

English Nursery Stock

Extensive stock of *RHODODENDRONS*, English grown, hardy kinds a specialty. *These are specially grown for America.* Bushy, well-grown plants, budded, 1½ to 2 ft., 2 to 2½ ft., and a few kinds 2½ to 3 ft. *ANDROMEDA, AZALEA, KALMIAS, etc.*, a good stock. *HARDY CONIFERS*, a large stock. Low prices can be quoted on all Conifers. *ORNAMENTAL EVERGREEN TREES, FRUIT TREES*, trained and in pots. *TRANSPLANTED FOREST TREES, FRUIT TREE STOCKS, etc.*

The stock is in excellent condition. *First grade stock only supplied.* Thirty years successful trading in the States. No agents. Write direct for wholesale catalogue.

Walter Charles Slocock Goldsworth Nursery

Half an hour's rail from London by
L. & S. W. Ry., Main Southampton Line.

WOKING
Surrey, Eng.

Another New Edition of Our 80-page Descriptive Catalogue

is now ready for delivery. We have added all the new things worthy of mention and omitted some of the old varieties that are no longer sold.

Rochester Lithographing Co.

22 ELIZABETH STREET
ROCHESTER, N. Y.

COLORED PLATES AND PLATE BOOKS

CABLE ADDRESS: NOVA BOSKOOP—A B C Code 5th Ed.

BOSKOOP, Jan. 26th, 1912.
Holland

Gentlemen:—Herewith beg to state that I have dissolved my partnership with

Messrs. W. VAN KLEEF & SONS

The Nurseries, Boskoop, Holland

and that I will continue the business relations for my own account from Jan. 27, 1912, under the name of

VERKADE VAN KLEEF

(W. VAN KLEEF, Jr., Prop.)

"NOVA NURSERIES"

BOSKOOP,
HOLLAND.

Hoping to be honored with your esteemed orders which will have my personal best care and attention.

Yours very truly,

W. VAN KLEEF, Jr.

NURSERIES:

*Boskoop,
Waddinxveen, (Holland).*

SPECIALTIES: Azalea, Buxus, Clematis, Conifers, Japanese Maples, Magnolias, Rhododendrons, select hardy varieties; Roses, new and old varieties, etc., etc.

Rhododendron Maximum and Catawbiense

WE ARE largely interested in Apple Orchards in the mountains of North Carolina and Virginia located in the virgin Rhododendron sections that have never been selected over, and are in position to handle orders of any size with skill and economy. Tell us what kind you want and how many and let us make you a price : : : : : : : : : : :

John A. Youngs & Sons

Greensboro Nurseries

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ANY Florist, Nurseryman or Seedsman who may plan to have us print a new catalog at any time within the next several months can save considerable money by letting us make the book NOW.

Write us how large a book you propose to get out, how many pages it will contain, and other details—and we will make quotations that show in themselves just what you can save by having your printing done this spring.

There are any number of perfectly good business reasons why we can produce printed matter at a lower cost in the months of April, May and June than at any other period of the year.

By letting us have your order now for the catalog you will distribute during the summer and fall, you can save a sufficient amount to make its purchase at this time a very good investment Let us show you.



J. HORACE McFARLAND COMPANY

MOUNT PLEASANT PRESS

HARRISBURG, PENNSYLVANIA

“Well Worth a Premium Over Mere Press and Proof Work”

THE MCFARLAND PUBLICITY SERVICE
HARRISBURG, PA.

Gentlemen: I have at hand proofs of catalog, which I have gone over, telegraphed corrections and released.

This is certainly an innovation in comparison to the usual set style of catalog, in which the most prominent feature is the prices. I believe that it will be pleasing to the public and will be imitated. I do not object to the price you have quoted. Of course, I could get the mere printing cheaper, but your care in working up the catalog is well worth a premium over mere press and proof work.

If the book is out within two weeks, it stands a chance of falling into far more hopeful hands than a week ago. California has been going through a very critical period. A drought only matched in 48 years has held us up until March 4, and so critical has it become that rural industries were in suspense. We are now having a storm that will largely save the situation in many places, and greatly alleviate it in others, but for some it comes too late. Our own region has not suffered at all

Very truly yours,

CARL PURDY

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., APRIL, 1912

No. 4

GENEVA AND NEWARK NURSERIES IN MIDWINTER AS DISCOVERED BY AN AMATEUR

Stocks and Storage. Prominent Nurseries in the Geneva District.

E. L. BERNAYS

Geneva seems to be fitted for the growing of nursery stock by both advantageous climatic and soil conditions. And so we find that the nursery business has developed to a great extent in that section, and that following the pioneer firms, other men have come in and their businesses have grown to large proportions with the increasing trade in nursery stock.

The people in Geneva take a justifiable pride in their nursery industry, and rightly, since the facts seem to bear out the case. The nurserymen have added greatly to the city's beauty; for we find the streets well planted and the private grounds of some of the growers are spots of beauty.

Altho the climate of Geneva is favorable to the growing of trees, the winters are so extreme that the stock has to be stored, and it was with the purpose of making a survey of general storage conditions and the status of the business in winter that the present trip was undertaken.

W. & T. SMITH CO., PROMINENT WHOLESALERS OF GENEVA

The grounds of W. & T. Smith are situated on a residence avenue a few minutes ride out of Geneva. The executive building and the packing and storage houses are scattered over a four acre plot. The planting grounds are over 700 acres in extent. This firm specializes in roses and ornamentals, and carries besides a full line of all the standard varieties of fruits and shrubs. In the large packing shed men were engaged in building boxes, and from the large amount of lumber on hand, it looked as if they were going to be kept busy all winter.

STORAGE FACILITIES

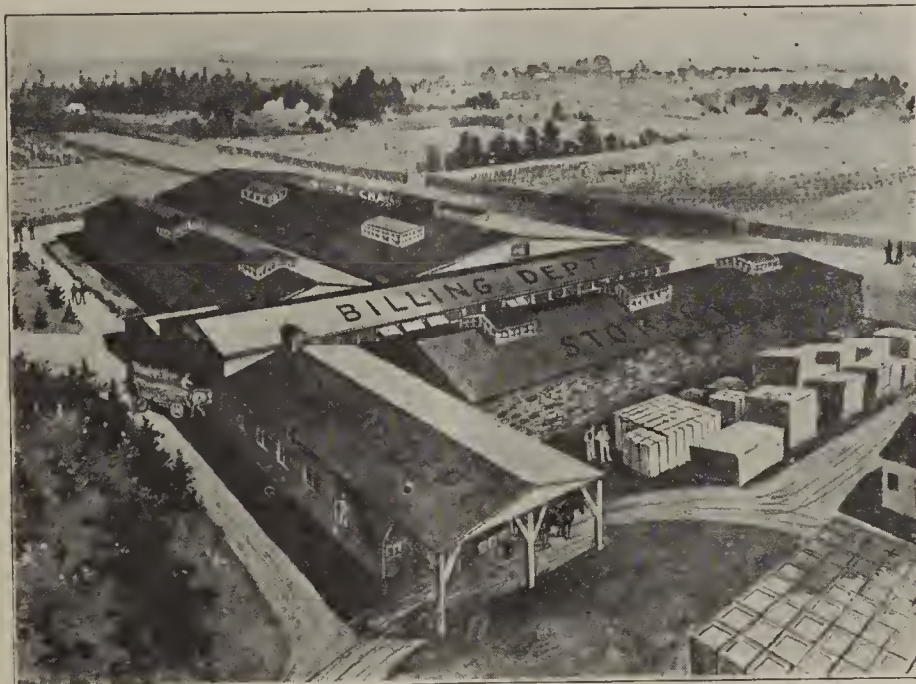
In the storage room, a frost proof building, kept quite dark, the various kinds of stock were stacked on supports according to their kind, variety, and grade. Their arrange-

ment was very methodical and their labeling enabled one to easily find them at any time. A great number of apples were noted, and concerning them Mr. Smith said that at present people are crazy on the subject of apples, and that apples are now so scarce in the East that prices are very high. Many of the apples are being shipped to Montana, and other

western points, altho the competition of the western nurseries is being felt at present. Cherries were also noted in good lots, and here the same difficulty in securing Mazzard stock was noted as at the Chase nursery, as the seed did not germinate well, said Mr. Smith.

A special feature of the Smith plant is the propagating houses for the roses and the five other rose greenhouses. They are produced in carload quantities, and present a beautiful sight to

the observer. The rose stocks are grown in these houses, and are healthy, vigorous specimens of the different varieties. Cuttings of these are made and put into sand in the propagating houses to form their roots. Into the two propagating houses 35,000 cuttings are placed, and during the winter the houses are filled three or four times. Every four weeks, therefore, the houses are entirely refilled. The Smiths' handle as many as half a million roses a year. The Killarney is a popular variety, but there are many new kinds originated every year. After the hardy roses have rooted in the propagating frames they are transplanted into pots and in the spring they are planted out in the field to remain there two years, after which they are placed in storage over the winter. Those in storage were in a special rose cellar. The roses were placed in sand because Mr. Smith believes that they keep better in this way. The temperature of this cellar was about 28 degrees. The small fruits were kept in a separate cellar. It was noticed that more excelsior was wrapped around the roots of these than on the larger fruits.



R. G. Chase Company's Establishment

WINTER WORK

The busiest place in winter in the largest nurseries is the trimming room. Here at Smiths' there were sixteen men continuously engaged in trimming the French stock as it came in the large eight foot packing boxes. Smiths' belong to the American French syndicate and are thus assured of obtaining what they want when they want it. Altho the French can produce the proper sort of seedlings, they have not learned how to nail packing boxes, for an evident waste of time and labor had been spent in nailing large spikes every three inches along the edges, when one every three feet would have been sufficient.

DECREASE IN NUMBER OF FIRMS

In talking of business in general and the nursery industry about Geneva, Mr. Smith remarked that, altho thirty years ago there were over four times as many firms in and around Geneva as there are at present, now the nurseries are much larger. It would be difficult to say whether there is an increase or not in production. Mr. Smith believes that Geneva is ahead of Rochester in the tree industry and about on a par with the Dansville section in this respect, but that while Dansville has many smaller firms Geneva has the production concentrated in the hands of a few men.

Apples are very high at the present time, prices being twenty to twenty-five cents now, where they were five to six cents in days gone by. This is due to the increased demand stimulated by the newspapers, the pomological societies, and the general boom.

The Smith Company sells exclusively at wholesale and supplies florists and other retailers.

THE RICE BROTHERS NURSERY

Rice Brothers' executive offices are situated near the outskirts of the town in a large frame building, bustling with the clink-clank of a large corps of stenographers, busy with the wholesale and retail ends of the business, which are, however, kept separate. The general trend of the business in the last three years has been very good, and business this year had been up to standard until the cold wave came, and put a temporary curtailment upon the orders. Credit is given the pomological societies and the general agitation for the movement back to the country, for the increasing business during the past few years. It is a common occurrence for people who know neither varieties nor the kind of fruit they want to ask for advice on what to buy, as they are intending to set out orchards.

The apples that seem to be most in demand are the red varieties. The general run of apples has been well cleaned out. The prices are, therefore, high. Ben Davis is a popular seller, while the Baldwin and Northern Spy are the other important varieties with this firm at present. Of these varieties a carload has been shipped to Oregon, a noteworthy triumph for the eastern nurseryman.

THE VARIETY PERFECT

The Perfect apple, a variety which originated in Maine and the sale of which is controlled exclusively by Rice

Brothers, promises to be of great value and has already won prizes at the pomological shows in Rochester. It is a variety suited for winter market and export trade. It is said to be superior to the Baldwin in eating quality, color and size, as well as firmness for shipping. It partakes of the characteristics of the Baldwin and Northern Spy. The tree is a regular grower, forming a large, regular, smooth top. The fruit, borne singly, has a skin which is very tough. The color is dark red. It is said for the apple that it never drops from the tree. From the testimonials on hand, it seems that the Perfect will fill an important place in its class of apple.

CARE OF STOCK

The storage houses of Rice Brothers are well stocked with all the different kinds of nursery stock. The stock is brought in from the field at the beginning of the cold weather and stored in the large shelves and stacks which line the walls of the storage house. The roots are protected with excelsior, which is kept at a considerable degree of dampness and sprinkled as occasion requires. To withstand great frosts, if they should occur, Rice Brothers have transportable coke stoves, scattered thru their storehouse. Fire is started in these occasionally and protects the trees from frost. The stock is kept in such a way that any variety may be gotten at a moment's notice; for each tree is labelled and diagrams of the arrangement are hung in a convenient place on the wall.

A tree bundling machine and a leaf stripper, run by a gas engine, represent some of the complement found in the packing shed. Here about forty men were busily engaged in making the necessary boxes for the early orders, which go out in March and April, the wholesale orders leaving earlier than the retail. Of course the crew in winter is much less than at other times of the year, when anywhere from 90 to 225 men are employed.

The stock of Rice Brothers is all carefully graded into four classes and in filling orders this is always taken account of. The largest fruit trees sent out are eleven-sixteenths and up, five to seven feet in height. The largest ornamentals are about fourteen feet high. Bulbs are kept in storage in special partitions, as are rhododendrons, bay trees, and a great variety of other plants.

JACKSON AND PERKINS COMPANY, NEWARK, NEW YORK

The offices and the storage plant of this progressive company are situated in the town of Newark. The firm does a large retail and wholesale trade, besides conducting a mail order business, not only in nursery stock but also in rose bushes and perennials. The storage and propagating facilities, as well as the other parts of the plant are, therefore, very extensive. The fact that the firm has nurseries in California as well makes the work during the winter heavy; for carloads of material are received from the coast. The firm fills orders all winter to a certain extent and so, though the boxes for the year's shipments had already been made on February 1, the men were kept busy at other lines of work, as loading, getting the French boxes from the station, working on the greenhouses, making cuttings, trimming seedlings, and so forth.

The new storage shed is of concrete, has two air spaces and its dimensions are 160 by 60 feet. The fruits only, graded very carefully and arranged in order, have their roots protected by excelsior, which is moistened occasionally. The varieties are very carefully labeled and are arranged in good order on stacks that reach to the ceiling. In these storage houses 400,000 rose stocks from England were observed.

A separate house, colder than the former, is devoted to the perennial plants, which have been rooted and are stored in sand. The place is kept cold, in order to prevent too early growth in the spring. Daisies are here kept in sawdust. Clematis, a specialty with Jackson and Perkins, is first rooted in the hothouse and then stored here over the winter. Whole benches full of phlox are contained in this house.

CONVENIENCES AND PRECAUTIONS

The system of heating for the storage house in case of very cold weather is by a hot water heating system. It had not been run for seven years, but had been started this year as a safeguard. The other equipment is in keeping with modern times. A telephone system connects all the different parts of the plant, chemical fire extinguishers are situated in convenient places, and electric lights are scattered around the buildings. A night watchman system is maintained thruout the year for fire protection.

A shop in which are all the farm wagons that Jackson & Perkins use gives us an idea of the many different departments required to make up the modern nursery. Electric power is used in this shop for driving an emory wheel, a wood saw, and so forth. A 40 by 100 foot building harbors the shrubs. Lilacs and tree hydrangeas were much in evidence. The tree lilacs were especially desirable. One large store cellar was filled exclusively with potted roses one year old which were going out in the field next spring. The upper part of this building is utilized for the shipping department of the mail order trade during the season.

SPECIALTIES

But the largest part of the plant of Jackson & Perkins is devoted to the propagation of roses and soft hydrangeas. Besides a large number of propagating frames, where the flowers are set out in the spring, there are seventeen greenhouses, heated by eight boilers, and connected by an alley way running at right angles to the houses. The first contained clematis and rose stocks; the second 30,000 young roses from rooted cuttings, among which two new varieties were observed, the Sunshine rose, yellow, and the Genevieve Clark, salmon; the third house contained an assortment of chrysanthemums and carnations grown from cuttings. The next was filled with healthy stock rose plants grown from cuttings and now being used for that purpose. The fifth showed a new type of hydrangea, the Avalanche, and roses grown from cuttings. Others were filled with roses in the second stage of evolution towards full bloom, some with asparagus, and one was devoted to young orange and lemon plants grown from cuttings. Two were brim full of the two inch rose cuttings, which were being made by four men working continually at this. After twenty-one days the cuttings root, and then they are transplanted into small pots,

and the house is ready for another consignment of rose cuttings; and thus the process goes on continually, and the houses are always kept full.

Jackson and Perkins buy their fruit seedlings, as well some of their roses, direct from the continent. One hundred and ninety thousand were still in the cases when the representative of THE NATIONAL NURSERYMAN visited the plant. They were frozen and were being thawed out gradually. On the other hand, some of the foreign material had already been grafted, and was stored in sand in one of the buildings, kept at a very cool temperature, while fifteen men were still engaged in trimming foreign stock. Detriche of Angers, France, supplies Jackson and Perkins exclusively and grades the stock before it is sent over.

Exhibitions

INDIANA APPLE SHOW

Plans are already actively under way for the second Indiana Apple Show to be held November 4th to 9th, 1912. The unqualified success of the 1911 show—the first ever held—has been a decided impetus to the horticultural revival which has been taking place in the Hoosier state during the last two or three years.

The Apple Show Commission has organized with the same officers as last year: E. R. Smith, Indianapolis, president; C. N. Lindley, president of the Indiana Horticultural Society, Salem, vice-president; Dr. H. E. Barnard, state food and drug commissioner, Indianapolis, superintendent; Hon. Joseph M. Cravens, Madison, treasurer; C. G. Woodbury, head of the Department of Horticulture, Purdue University, Lafayette, secretary.

The Show Management is promising a premium list which will go ahead of the \$3,000 in gold awarded at the 1911 show. Indiana fruit growers are advised to begin preparations at once for growing the right kind of exhibition fruit.

Obituary

LOWELL B. JUDSON

Lowell Byrns Judson was born in Lansing, Michigan, December 31st, 1877, and died March 7th, 1911, in the Albany Hospital, Albany, N. Y. He attended Northwestern University 1896-1898; graduated from Harvard University in 1900; and from Michigan Agricultural College 1902; from 1903 to 1906 was Professor of Horticulture in the Idaho Agricultural College; from 1906 to 1911 was Assistant Professor of Horticulture at the New York State College of Agriculture, Ithaca, N. Y.; assistant-secretary of American Pomological Society, and was identified with other similar organizations. Professor Judson specialized in forcing flowering bulbs with anesthetics, and in floriculture in general. Since Professor Judson left Cornell he has been associated with his brother in managing their fruit farm at Kinderhook, N. Y. He took considerable interest in the work of the Western New York Horticultural Society, of which he has been a member since coming East. Two brothers, Paul and Wilbor, survive him.

PRELIMINARY ARRANGEMENTS FOR BOSTON MEETING

Reports from Various Committees in Charge.

A meeting was recently held at Boston of the Committee on Arrangements for the annual convention of the American Association of Nurserymen, composed of John Hall, Chairman, W. H. Wyman, and Harlan P. Kelsey, and Chairman E. A. Robinson of the Committee on Exhibits and J. Woodward Manning of the Committee on Entertainment, respectively. The report comes to *THE NATIONAL NURSERYMAN* that Boston nurserymen with typical New England hospitality are enthusiastically preparing for the convention, that liberal entertainment is being provided—so that the convention may not be all work,—and that every nurseryman who can be reached will be bombarded with the best ammunition the Committees can provide to enforce him to surrender and accept the invitation to meet with the Association in historic Boston. The dates of the meeting are June 12, 13, and 14, 1912.

ARRANGEMENTS

The headquarters for the convention have been changed to the Hotel Somerset, a thoroughly fire-proof structure. It is an imposing building on Commonwealth Avenue, with reasonable rates. There is a good hall for sessions, and ample space for exhibits.

Railroads at all points west and south of Boston will issue thirty-day summer tourist tickets, which are liberal in reduction from the regular rates. Official notice will be mailed to members and others very shortly by Secretary John Hall, 204 Granite Building, Rochester, N. Y., to whom applications for further particulars may be made.

JOHN HALL.

ENTERTAINMENT

Wednesday evening, June 12th. A Lecture at the Hall of the Massachusetts Horticultural Society by Dr. J. K. Shaw of the Massachusetts Agricultural College on "The Variation of Apples under Different Climatic Conditions." An illustrated lantern slide lecture.

Thursday, P. M. A visit to The Arnold Arboretum with the service of special guides.

Friday, P. M. A steamboat excursion in Massachusetts Bay with Clam Bake in evening.

Other special entertainment for the ladies is being arranged.

J. WOODWARD MANNING.

AMERICAN ASSOCIATION OF NURSERYMEN BOSTON CONVENTION

It seems to be a foregone conclusion that the Convention of this Association to be held in Boston, June 12-14, will be a conspicuous success. The secretary has in the press an

attractive circular which will be mailed to over a thousand nurserymen in a few days. It should prove a "Winner" of new members. He has also sent out a "Special" to the thirty-six vice-presidents pleading for a personal canvass for new members, and favorable responses are coming in.

Mr. C. J. Maloy is getting some splendid material together for the program, already having secured Messrs. Jackson, Dawson, D. S. Lake, William C. Barry, J. B. Pilkington, of Portland, Oregon, with "more to follow." Probably one of the most instructive and interesting features will be a question box conducted by Mr. J. M. Pitkin, Newark, N. Y.

Regarding entertainment, Chairman J. Woodward Manning, is well-nigh overwhelmed with events. Among the several features already decided upon, are a stereopticon lecture in Horticulture Hall, on the evening of the first day of the Convention. Then the Arnold Arboretum will be an exceedingly attractive item, through which members will be piloted by special guides. The collection of hardy trees and shrubs is superior to anything of its kind in the world.

There will be a steamboat trip along the north and south shores of Boston Harbor and a genuine New England Clam bake.

Taken altogether the Boston Convention will be one of the red letter spots in the history of the American Association.

Hotel Somerset, located on Boston's finest thoroughfare, Commonwealth Avenue, will be Convention Headquarters, and as soon as the Secretary's announcement containing hotel terms reaches members, they should lose no time in securing rooms.

We urge upon every member to make the effort to secure one new member and help boost the list towards the thousand mark.

For additional information address John Hall, Secretary, 204 Granite Building, Rochester, N. Y.

THE NATIONAL NURSERYMAN wishes to offer an apology for a misunderstanding in the editorial office through which the name of Mr. E. W. Chatl n was attached to the half-tonc of Gen. A. J. Fletcher, in connection with the notice of the Tennessee State Nurseryman's meeting in the March issue.

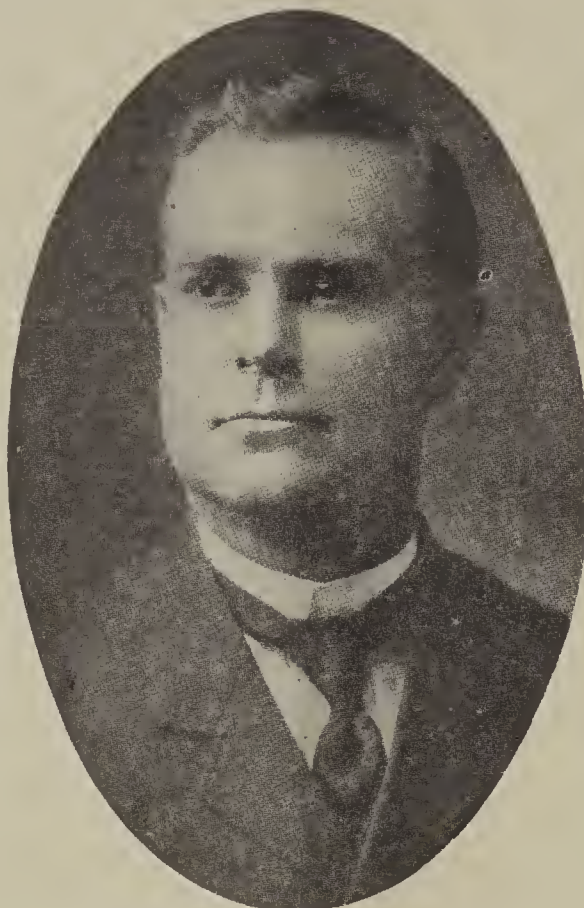
THE NATIONAL NURSERYMAN,

Find our check herewith to cover balance on advertising to date. Also copy of our new wholesale price list. As you will note our trade is mostly with the large nurseries, and we find that *THE NATIONAL NURSERYMAN* "sells the goods."

With compliments of the season, we remain,

Pekin, Ind.

GRAY'S NURSERIES.



GEN. A. J. FLETCHER
Cleveland, Tenn.

Quiz Column

ED. NATIONAL NURSERYMAN.

Dear Sir:

We have had the most severe January ever experienced by the oldest settlers here. My frost-proof building (?) was penetrated, and a quantity of apple root grafts, made about last week of last year, were frozen. They were packed in boxes with damp excelsior. This is my first experience with frosted root-grafts. Do you think they will be damaged if I allow them to remain in the box untouched until they gradually thaw out?

Port Elgin, Ont.

J. H. W.

ED. NATIONAL NURSERYMAN:

The course which your correspondent outlines with reference to root-grafts is the best possible one, and the chances are that if his cellars can be kept quite cold, so that the frost is brought out gradually, there will be no harm done. Would caution him not to disturb them at all—leave the boxes just as they are until the frost is entirely out.

Rochester, N. Y.

BROWN BROTHERS COMPANY.

ED. NATIONAL NURSERYMAN:

We are of the opinion that the root-grafts referred to will not be damaged if they are allowed to remain in the box untouched until they gradually thaw out without artificial heat.

Rochester, N. Y.

ELLWANGER & BARRY.

ED. NATIONAL NURSERYMAN:

Where apple root-grafts are well covered with damp excelsior and packed in boxes, I do not believe it will hurt them to freeze solid, providing you let the frost out of them gradually. This has been our own experience.

Rochester, N. Y.

THE WOODLAWN NURSERIES.

Our Exchanges

AMERICAN FRUIT AND NUT JOURNAL

This paper has recently changed hands, and the present board of editors, beginning with the January-February number, are as follows: H. Harold Hume, editor; W. N. Hutt, associate editor, and W. N. Roper, managing editor. This publication is a bi-monthly, and we congratulate the editors on the appearance of the first issue for the year 1912. The large number of excellent half-tones is a noteworthy feature. The present number is almost entirely taken up with matters relating to the 1911 conventions of the National Nut Growers' Association and the Northern Nut Growers' Association, thus standing as an indication of the important work which the *American Fruit and Nut Journal* believes these Associations have to do and are doing. Sketches of the work of President H. K. Miller of the National Association, and of Dr. Robert T. Morris, president of the Northern Association, are presented.

THE FEDERAL INSPECTION BILL

Legislative action on this measure took an unexpected turn due to the attitude of the California nurserymen as announced by Chairman Pitkin in our last issue. The action of the Californians in desiring quarantine and inspection at port of entry is after all not very surprising. With the memory of the introduction of San José Scale from Japan less than a quarter of a century ago, and with the knowledge that constant vigilance is required to bar the introduction of other pernicious pests from the Orient as

well as the Mexican border, the Pacific coast will have taken the stand already described.

In the present issue of the NATIONAL NURSERYMAN Mr. McHutchison has demonstrated with convincing clearness what we have always claimed, namely, the impracticability of inspection at port of entry. Possibly the arguments set forth will have less weight with San Francisco importers than with those operating in Atlantic ports. On the other hand with the excellent inspection machinery in operation in every county in California there should be no difficulty on the part of West coast importers to arrange for inspection at destination.

The legislative committee is undoubtedly doing the wise and diplomatic thing in promoting the bill along the lines outlined in Chairman Pitkin's letter appearing in our last issue.

WESTERN NEW YORK NURSERIES

It may not be generally known that New York stands first in the commercial importance of several of our horticultural industries. Prominent among these are the production of deciduous fruits in which she exceeds all other states in the Union; in the production of flowers and ornamental plants; in the production of vegetable and truck crops and finally in the production of tree crops, commonly called nursery stock. In this latter industry her reputation has been strong and unrivaled for many years past. Notwithstanding the fact that New England cradled most of the infant industries of the nation, it is worthy of record that here we have an exception, for since the Flushing nurseries were established in Long Island, nearly a century ago, the commercial aspects of tree culture and tree propagation have been constantly paramount in the Empire State.

Having its inception in the extreme eastern part of the State the nursery business secured a firm foothold in the extreme western part of the State not long after that region fell under the civilizing influence of the pioneer and proved its adaptability to the production of fruit.

We are presenting in this issue a few sketches of nursery conditions as discovered by an amateur visitor to some of the principal nursery plants of western New York. When it is remembered that the visit was made in mid-winter and when the conditions as described therein are realized we are ready to appreciate the remarkable advance of the present over the past, in reference to methods of handling stock and we are also profoundly impressed by the extraordinary growth of the industry. The descriptions will be continued in our next issue.

ANNOUNCEMENT

W. M. Scott has resigned as pathologist of the Bureau of Plant Industry, U. S. Department of Agriculture, to take charge of a newly established research and special service department, organized by the Thomsen Chemical Company, Baltimore, Md. This change of position does not materially change the nature of his work, other than to broaden its scope. The work of this new department will consist of the investigation of insects and fungous diseases injurious to fruits and truck crops.

COÖPERATION IN SELLING NURSERY STOCK AND MARKETING FRUIT

Extract from an Address Delivered by T. B. Thackston at the Tennessee Nurserymen's Association Meeting

Some one has said that every man has a subject which is his pet theme. If I have a pet theme or theory, a hobby, your Secretary would doubtless say, that hobby is *Coöperation*. I believe in coöperation most heartily, for the reason that I believe that it will assist you in solving most of the great problems of the day that confront the American people—the social, the economic, the industrial problems of the day. Further than this, I am confident that coöperation will unite the interests of the producer and the consumer. I shall simply take this subject in a plain way and view the issue, though I claim no originality, for I have long since learned that no one man thinks all the good things.

Coöperation in selling nursery stock and marketing fruit, this is the subject that I have been assigned. When you read the subject, you would suppose that it would divide itself into two parts, I prefer to discuss these together.

Coöperation properly means working together where two men are doing the same line of work and doing it in the same way, but I believe that it is possible for two men engaged in different but related lines of work to coöperate. I believe that the nurseryman can coöperate with the fruit grower, as well as two nurserymen can coöperate. We need a complete, full, practical soil survey of the State, especially of the fruit areas of the State, the orchard locations. I have come to the conclusion that orchards have been located as a matter of experiment. I believe that you have not studied the condition of orchards, the soil conditions of the State. It will cost money to make such a survey of the State, but it will return one hundred fold. Other sections have these soil surveys, these orchard surveys, why should not Tennessee? Why should a man who lives in Tennessee, who has decided to establish a commercial orchard, go down into Georgia to get a location? I do not understand why he should; I think it is a mistake.

Again, I want to say just one word to the nurserymen. I think there should be some coöperation in the matter of selling nursery stock, and I want to make a suggestion to you. I believe we have something like 350 nurseries in the State, nurserymen and fruit growers combined. Most nurserymen send throughout the State, agents who will just show pictures of the fruit. These men know very little about nursery stock or fruit trees, or the growing of trees, and they do not hesitate to sell a tree to a purchaser whether it is adapted to that locality or not; they want to sell. I want to suggest that

there is an educational possibility in this. When we get this soil survey of the State, I want to see the nurserymen visit the localities where these orchards will be grown; if necessary go to other states and talk to the people growing fruit. I want to have them teach the ordinary man how to properly care for his trees; how to set them out; how to cultivate; how to prune; how to use the remedies for diseases and insects. Now, you may say that this is going to quite an extreme;

I do not think so. We are building up an industry, and we want to see that the orchards are profitable.

Again, you can coöperate in the enforcement of the laws of the State, especially the laws against the introduction of diseases. Only a short while ago, I attended a Short Course in Agriculture held at Cleveland, Tennessee. There were exhibited there trees that had been sold in that county, that had hairy root and crown gall, and the agent was trying to convince the man who had purchased those trees that they were not injured. I do not want that thing in Tennessee!

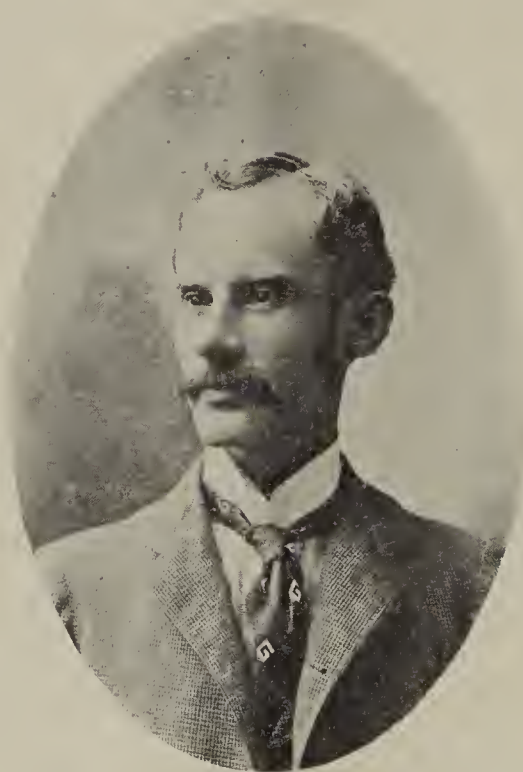
Again, I want to see fruit trees sold and then that particular variety delivered to your purchaser. Gentlemen, I do not believe in this thing of substitution. If I send to you an order for trees, I want those particular trees delivered to me,

and if you cannot supply me, then notify me that you cannot fill the order but will supply other trees.

Again, I want to insist that it is necessary that the nurserymen be especially particular in supplying trees that are true to name. Years ago, I knew a gentleman who was planting a commercial orchard. He put out 10,000 apple trees; waited patiently several years for fruit to mature. When it did so, he found about ten per cent of the trees were what he ordered; he cut them down and went out of business.

I am inclined to think that here in Tennessee, it would be best to establish community orchards. Let the citizens select the location and then employ an experienced man to look after the management; I believe that for the present this would be the wisest plan.

Now another thing; you fruit growers are not advertising your products. When I look around this room at this fruit, and inquire where it came from, I find that it comes from the West. I asked each grower here, where are your Tennessee apples? Only a few are shown. Either you cannot grow apples in Tennessee equal to these, or you are not growing them. I think that you ought to exhibit your fruit at your home, county and state fairs. If you can grow fruit of a



The New President of the Tennessee Nurserymen's Association, Mr E. W. CHATLIN of Winchester

better flavor than that of the West, prove it, don't just talk about it. About a year ago I attended the National Corn Exposition. Virginia had a display of tobacco and apples and the display was a good one. It was not only good, but the gentleman in charge had under the counter fifteen or twenty boxes of Virginia apples, so that whenever a visitor would come up, he would give him one. It was the most attractive exhibit in the whole place, the people coming not only to see, but to test it. In another part of the building there was Western fruit for sale; the man was alone.

Now this meeting is an advertisement of coöperation; it is a gathering of practical men—of nurserymen, fruit growers, and beekeepers. Let us coöperate all along the line, and when you have these mountains and ridges dotted with commercial orchards, you need not fear that you are going to glut the markets. All this coöperation had its origin in necessity. Coöperation means the widening of the world, not only North and South, but all over; and by public coöperation we can sell our fruit in the best markets of the world, at the best prices.

THE CONVENTION

Hotel Somerset, Headquarters for the 37th Annual Convention of the American Association of Nurserymen

The American Association of Nurserymen, will make their headquarters at Hotel Somerset, Commonwealth Ave., Boston, for their thirty-seventh annual convention. Commonwealth Avenue is the most aristocratic thoroughfare in New England; over two hundred feet in width, with fine shade trees and elegant residences on either side.

The Hotel covers an area of nearly fifty thousand square feet. The architecture of the "Somerset" is modern and pleasing, the construction substantial and thoroughly fire proof.

The rooms are commodious and conveniently arranged, the closets are unusually large. Telephones, electric lights, steam heat, open fire places and four elevators complete the detail of modern hotel equipment. Some idea of the exceptional facilities for entertaining is afforded by the fact that the hotel contains two ball rooms, with their full complement of reception and smoking rooms. In the two ball rooms suites are held the noteworthy social and public functions of Boston.

The clientele of the Hotel Somerset includes not only Boston's most exclusive set, but also the Nation the Commonwealth, of Massachusetts, and the City of Boston have selected this hotel for all the entertainments, banquets and hospitalities accorded to notable visitors, both national and international.

The "Somerset" is both a family and transient hotel, and is favored as a winter residence.

Ten minutes ride from either the Back Bay or Trinity Station; all Boylston street and Massachusetts Avenue cars pass within a short distance of the hotel.

Automobile parties will find the Hotel Somerset a most convenient place to stop, it being on the direct route to and from New York. also White Mountains, Bar Harbor, North and South Shores. Only a short distance from the Automobile Centre of Boston.

REPORT OF PROGRESS FROM PROGRAM COMMITTEE

Judging from the beginnings which have been made by Mr. C. J. Maloy, Chairman of the Program Committee for the Boston convention, a treat is in store for those attending the meeting; for already the names of some of the well known authorities along the lines of plant growing from various sections of the United States have been placed on the program. Papers are expected from Jackson Dawson of the Arnold Arboretum, D. S. Lake of Iowa, J. B. Pilkington of Oregon, and Wm. C. Barry of Rochester, New York.

A feature of the meeting will be the question box, presided over by J. M. Pitkin of Rochester. This has long been a part of the program of many horticultural society meetings, but is a new thing with the American Association of Nurserymen, and the popularity which it gains will no doubt have something to do with the question of its continuance in subsequent conventions.

The friends of Mr. P. Ouwerkerk of Weehawken Heights, N. J., will regret to learn that he received a cable conveying the sad news that his only brother and partner, Mr. Ads Ouwerkerk died suddenly in Boskoop, Holland. The deceased was 65 years old and leaves a widow, three daughters and five sons, from which four are in the nursery business in Boskoop.

PROFESSOR HUME IN HOSPITAL

Professor H. Harold Hume, manager of the Glen Saint Mary Nurseries, is in the Post-Graduate Hospital, New York, recovering from an operation.

VARIETIES RECOMMENDED BY HEDRICK AND WILSON AT NEW YORK NORMAL INSTITUTE

The following lists of apples were recommended for commercial orchards in the different sections of the state. Other varieties may be desirable for family use or a nearby trade. It is very unwise to plant—except experimentally—varieties originating in a more southern section:

For Western New York, in order of ripening—Permanent trees, Fall Pippin, Greening, Baldwin and Northern Spy; permanent or fillers, Twenty Ounce, Pippin, T. C. Kings and McIntosh; fillers, Alexander, Oldenburg, Wealthy, Rome Beauty and Wagener.

For Hudson River district—Omit Northern Spy, Twenty Ounce and Wagener and add Sutton's Beauty to fillers; on heavy land and in high altitudes the Spy often does well.

For Lake Champlain region—Permanent; Greening, McIntosh and Northern Spy; fillers, Alexander, Oldenburg, Wealthy and Fameuse or Snow.

For Catskill and Schoharie district—Permanent, Fall Pippin, Greening, Baldwin, Esopus Spitzenberg, McIntosh and Northern Spy; fillers, Alexander; Oldenburg and Wealthy.

Mr. P. D. Berry of Dayton, O. has been ill for nearly three weeks. Latest reports are that he is on the road to recovery.

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STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dreshertown, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.
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Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
National Nurserymen's Association of Ohio—President, J. W. McNary, Dayton O.; secretary, W. B. Cole, Painesville, O.
Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.
Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary, Earl Peters, Mt. Holy Springs, Pa.
Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.
Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.
Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

FEDERAL INSPECTION BILL

The Federal Inspection Bill, about which so much has been written, is still in the hands of the Agricultural Committee of the House, but owing to the necessity of making certain changes in its phraseology, it now appears as H. R. 21174.

Thanks to the indefatigable energy of Chairman William Pitkin, many of the objectionable features of the original bill and its successors have been entirely eliminated or modified and it now seems likely that when the bill is finally passed it will be in such form that it will merit the approval of all nurserymen,—or as Chairman Pitkin stated in his report to the Nurserymen's Convention last June, "Safe, sane and practical legislation."

Present indications are that the operations of the law must be in the hands of the Department of Agriculture, as it is claimed by the legal attorneys in the Department at Washington that a Horticultural Commission or Board would have no responsibility or standing in Europe and as the inspection of foreign nurseries is one of the principal reasons for the enactment of the measure it would be unwise to pass a law which would be inoperative over there.

THE NATIONAL NURSERYMAN was the first to suggest the idea of a Federal Horticultural Commission as being the safest and most satisfactory method both to the Department of Agriculture and the nurserymen to carry out the provisions of a law so wide in its scope and character, and we are loth to have this feature eliminated.

The original Simmons Bill, which the Department sought to have enacted into a law some three years ago, caused considerable friction between the Department and the nurserymen but fortunately both sides are now on a most friendly footing, working hand in hand and in harmony; and we have the fullest confidence that under the able directions of Chairman Pitkin, Dr. Howard and Prof. Marlatt, the bill will finally be put into such form as to merit the endorsement of the nurserymen of this country and will contain no features which will cause hardship or loss to any one carrying on business on up-to-date methods.

COLLEGE TRAINED FARMERS

Some people question whether the young man who has been graduated from a college of agriculture is fitted by this training for the practical management of an agricultural enterprise. They have a good deal of contempt for theory, which, supposedly, is about all the student gets. Not so the writer of a note entitled "The Part Which Capital Plays," in a recent number of *The Country Gentleman*. This tells the story of Farmer A, who said he did not make twenty-five dollars on his farm in a certain season, and of Farmer B, who, under equally adverse conditions, netted several hundred dollars. Farmer A succumbed, not without a murmur, presumably, but without any serious attempt to turn misfortune into profit, to unfavorable circumstances caused by unexpected loss of animals and damage by insects. Farmer B, when his crops were attacked by insects and by a hailstorm, found a desirable way to use the damaged grain, which in the end resulted in a considerable gain to him. Farmer B is the type of business man who does

not settle back and consider himself defeated because, after an initial attempt on his part, things do not seem to go his way; nor does he flinch at a temporary outlay of money which common sense tells him will shortly bring him profit. The policy of this man spells progressive. This is the man who attends the meetings of societies whose work bears on his business, who reads trade papers and farm journals,—not those with the smallest subscription price, but those containing the largest amount of information of interest and value to him—and who invests capital in implements and fertilizers which are going to save time and increase quality and size of crops. To us the most interesting part of this article is contained in the last two sentences: "It is the young men who have gone through college and have returned to the farms who are changing conditions. They have the benefit of contact with business activity, together with the training to think quickly, that promises well for the improvement of the farms." We are incidentally led to wonder how many nurserymen give their sons and daughters an opportunity to take a course in a college of agriculture.

NEW YORK FLORISTS ORGANIZE

For some time a movement has been on foot for the federation of New York State Floricultural interests. The state has supported for many years a number of live, progressive clubs, but no effort had been made up to this year to co-ordinate or harmonize the work of these clubs. The credit of launching the movement is to be accorded to the New York Florists' club, the largest and most influential of the states' floricultural units. This club issued a call for a meeting of delegates in February. The meeting was held at Ithaca and an organization known as the New York State Federation of Floral Clubs effected. This organization will be primarily an educational and legislative body. It will consider such matters of general public interest as experiments and investigation in behalf of floriculture, and legislation. The Florists' Bill now pending at Albany will be pushed, while the question of a Horticultural Building at the State Fair Grounds will also receive attention. On the whole, this may be regarded as the initial step making for organized effort in behalf of floriculture.

THE MEETING HABIT

Some of us are inclined to be stay-at-homes. "And why not?" you may say. "The nursery fraternity is composed of a group of busy men. Our stock needs careful and constant attention, and if there be a short period in the year when we are free from the work of planting seed, of cultivating, of grafting, of storing, and the thousand and one other things that constitute a nurseryman's daily routine from beginning to end of the growing season, then we are under the necessity of preparing for another year. No sooner does the close of one season come than we must begin to work and plan for the next, and we must be on hand, no matter what the time of year, to see that everything goes right." But now, are you very sure about that? Is it true that you will get the best results by always staying on your own grounds, and not getting away and learning something of the other fellow's experiences?

"But," you say, "we belong to our state nurserymen's association. We have been a member for years, we get our reports regularly, and find some mighty good stuff in them." But this isn't the whole thing, after all. You will find that it will do you more good to *hear* those papers, to take part in some of the lively discussions, where your practice or your experience with some perplexing problem will be of as much interest to some fellow nurseryman as his is to you, than to read these things over from the cold, unfeeling pages of a printed report, where the personality of the speakers is largely obscured. If you will take a few days off with your family for the next national or state nurserymen's meeting, see new scenes and new faces, get acquainted with some of the men whom you have heretofore known only by name, and have an opportunity to talk over your problems or your successes both in and out of meeting, the pleasure and profit of the occasion will remain with you for months or years. Don't allow yourself to get into a rut. About the hardest work you ever did will be to pull yourself out of it.

Note and Comment

DR. TRELEASE RESIGNS

It may be of interest to American nurserymen, especially to those who had the opportunity of visiting the Missouri Botanical Gardens at the time of the 1911 meeting of the American Association of Nurserymen, or at some other time, to learn that Dr. William Trelease has resigned his position as Director of the Garden, on account of his desire to devote his time to botanical research work. Dr. Trelease's connection with the Shaw Garden in the capacity of Director has continued for nearly a quarter of a century, his appointment having been made in 1889 on the recommendation of Asa Gray.

SMUDGING IN FLORIDA

We hear a good deal about orchard heating in the great fruit sections of the West, but not much has been written concerning the heating of plots on which vegetables are grown as a protection against frost. However, late this winter, Florida vegetable producers resorted to smudging to save their crops. After one cold snap had damaged their vegetables to the extent of fifteen or twenty per cent., they prepared themselves; and when warned by the weather bureau officials that Jack Frost was en route, they were ready to receive him, with mulches and smudge pots in their beds of young vegetables. Despite the precautions, beans and tomatoes were rather badly hurt, but other crops were mostly saved by these modern protective methods. In Louisiana lettuce showed frost damage.

AMERICAN APPLES IN GERMANY

It seems that the result of complaints by German apple importers has been greater care on the part of American dealers. Consular reports state that the total of fresh apples exported from the United States to Germany during 1911 was more than double that shipped the previous year.

NUT GROWING IN THE NORTHERN STATES

C. A. REED

With the exception of the chestnut, no species of native nut-bearing tree has become of prominent commercial importance as a cultivated product in that portion of the United States lying east of the Mississippi and north of the Ohio and Potomac Rivers. The growing of foreign nuts has attracted greater attention than has the development of the native species. Almost with the beginning of our national history, the culture of Persian walnuts attracted considerable attention throughout the East, especially in the States of the Middle and North Atlantic Coast. The European and Japan chestnuts, the European hazels and the Japan walnuts have since come into considerable prominence in the same area.

Within the district so outlined, which comprises as it does practically the entire northeastern quarter of the United States, there are few sections of large extent to which some species of native or foreign origin has not already demonstrated its adaptability to the soil and climatic conditions, or to some other locality of approximately similar conditions.

In order of importance, the species of native nut-bearing trees known to be suited to some portion of the area under discussion, the following list is probably not incorrect: The American chestnut (*Castanea dentata*); the shagbark (*Hicoria ovata*); the American Black walnut (*Juglans nigra*); the butternut (*Juglans cinerea*); the pecan (*Hicoria pecan*); the shellbark (*Hicoria laciniosa*); and the hazels (*Corylus Americana*; *Corylus rastrata*). The American beechnut (*Fagus atropunicea*. Sudworth) naturally belongs to this list, but as it is probably not under cultivation as a nut tree at any place in the United States, it will not be discussed at this time.

The principal foreign species which have been tried in the Northeastern States are: The European and Japanese chestnuts (*Castanea sativa* and *C. Japonica*); the Persian (English) walnut (*Juglans regia*); the Japanese walnuts (*J. Sieboldiana*, *J. cordiformis*, and *J. mandshurica*); the European hazels (*Corylus avellana* and *C. tubulosa*).

THE AMERICAN CHESTNUT (*Castanea dentata*, MARSH)

Representatives of the American species of chestnut are found native to a large area. The species seems to evade extremes of temperature, cold, alkaline or acid soils, and an excess of moisture. It is apparently at its best in the sandy and coarse, gravelly soils of the uplands from lower New England to the southern extremity of the Piedmont Plateau in the East and from the extreme southern part of eastern Michigan to northern Mississippi on the West.

Although the quality of the American chestnut is unapproached by most of the foreign species, comparatively little attention has been paid to its development, while considerable effort has been directed toward the introduction and cultivation of the large European and Asiatic species. Comparatively few varieties of the American species have been originated, and of these none have been widely dis-

seminated. The one variety, which, because of its size, productiveness, and quality, has been extensively propagated and widely planted, is the Paragon. This variety originated at Germantown, Pa., and was introduced about 1888. It is believed to have originated from a seed grown from a nut obtained from a European seedling, then in one of the gardens of Philadelphia. This variety has been propagated very extensively both in the nursery and by grafting to native stumps and sprouts of cleared-over forest lands. In the nursery it is now chiefly grafted to seedlings grown from Paragon nuts. This variety is both precocious and prolific. In a 25 acre orchard of young nursery grown trees planted near Boonville, Indiana, during the spring of 1910, nearly every tree set a number of burs during the same season. From two or three to from fifteen to seventeen burs had to be removed from each tree in order to prevent over-taxation.

Mr. Charles A. Green of Rochester, New York, Mr. E. A. Rhiel, of Alton, Illinois, and Mr. G. W. Endicott of Villa Ridge, Illinois, are the introducers of a number of improved varieties of the American sweet chestnut, illustrations and descriptions of which may be had upon application to these gentlemen.

The extreme severity of the chestnut blight throughout the section where it has made its appearance, the rapidity with which it has spread since its discovery, and the present practical impossibility of keeping it under control, have put the future of the chestnut industry of this country very much in doubt. As has already been made clear during the present meeting, this disease has resulted in the entire destruction of thousands of forest and park chestnut trees in the sections where it has appeared, and as evidence of the further apprehension with which the chestnut blight is taken into account by the authorities familiar with it, it may be well to state that at the last meeting of the Pennsylvania State Legislature, the sum of \$275,000 was appropriated for use in studying and combating this disease. Above every other question bearing upon the subject of chestnut culture, this disease is by far of the greatest importance to the prospective planter.

THE SHAGBARK HICKORY (*Hicoria ovata*)

This species is native to the greater portion of the area under discussion. It is not common north of southern Maine and is much less abundant than the chestnut in the lower New England and North Atlantic States. It is best adapted to regions of deep fertile soils well supplied with moisture, yet without standing water. It is very difficult to propagate by asexual methods and ordinarily requires from twelve to twenty years to bring it into commercial bearing. For these reasons, exceedingly few varieties have been called to public attention. The locations of several individual trees of superior merit to that of the average are now known and arrangements are being made for their early propagation.

The most practical means of obtaining young trees for nut purposes at the present time is to plant nuts from selected trees. This method will, of course, lead to the wide variation common with seedling trees, but until experienced propagators meet with better success in their efforts at grafting or budding this species than in the past, there is little use for the amateur to undertake it.

THE AMERICAN BLACK WALNUT (*Juglans nigra*)

The American black walnut is common to much the same general area as the shagbark hickory. It is much less exacting in its soil and moisture requirements than that species and is much more frequent within the same area. Its representatives, either native or planted, are found in almost every kind of soil and at nearly every degree of elevation from the well drained lowlands to the mountain sides. As with the shagbark, few varieties of the black walnut have been introduced. The same interest is now being shown by leaders in nut culture in their efforts to locate and insure for propagation superior varieties of black walnuts as with the shagbarks.

THE BUTTERNUT (*Juglans cinerea*)

The butternut or white walnut, as it is sometimes called, is one of the most neglected of our native nut-bearing trees. In the forest it abounds under much the same conditions as does the black walnut, to which it is closely related. Its native range within the entire United States extends further to the East and North and is not found so far to the South or West as is the black walnut. Like the shagbark, it is generally less abundant within the area of its native range than is either the chestnut or the black walnut within their respective native areas.

So far as is known to the writer, not a single variety of the butternut has been introduced.

THE PECAN (*Hicoria pecan*)

The pecan is native to a very small portion of the area under discussion. North of the thirty-eighth parallel, it is found native along the river bottoms bordering on the Mississippi River and its tributaries to Davenport, Iowa, Terre Haute, Indiana, and nearly to Cincinnati.

Scattered individual trees are by no means rare in Illinois, Indiana, Ohio, Pennsylvania, Delaware, and New Jersey, as far north as the forty-first parallel, and they are occasionally found in the lower parts of Michigan, New York, and Connecticut. In rare instances, they have been reported near the Atlantic Coast in Massachusetts.

It is doubtful if any of these northern trees, which are well outside of the area included by the native range of the pecan have yet borne nuts of good size and quality to an important extent. The efforts to carry the pecan beyond the limits of its accepted range have thus far been mainly by the planting of seedling nuts. During the past three or four years, intelligent efforts have been made by several persons in the State of Indiana to locate wild or seedling trees of sufficient merit to justify their propagation as named varieties for northern planting. Already they have called to attention and are propagating as rapidly as possible the Indiana, the Busseron, the Major, the Greenriver, the

Warrick, and the Hinton. Some of these varieties compare favorably in the matter of size with the average pecans of the South, and while none of those yet discovered are of extremely thin shell, in points of plumpness, richness, bright color of kernel and pleasant flavor, one or two of these northern varieties are not excelled by any of the southern sorts. Scions and buds from these trees have been used in the propagation of nursery trees, and already a few trees have been disseminated. Several nurseries are now propagating these varieties, but all combined their output will necessarily be very limited for some years to come.

Somewhat in advance of the steps taken in Indiana, two varieties, the Mantura and the Appomattox, have been introduced from southeastern Virginia by Mr. W. N. Roper of Petersburg.

The Mantura pecan is distinctly of the southern type, large, thin shelled, and a ready cracker. It has been disseminated throughout the North to some extent when grafted upon the stocks of northern seedlings, and it is highly probable more hardy trees will be the result.

The Appomattox pecan has not yet been propagated to great extent. Since the variety was called to public attention, a horse stable has been erected immediately under the tree; and consequently, being greatly over-supplied with nitrogen, it has been unable to normally develop its crops. Good specimens, therefore, have not been obtainable for description during the past several years.

In the mind of the introducer, however, it is a valuable variety, and well worthy of further observation.

THE SHELLBARK HICKORY (*Hicoria laciniosa*)

The shellbark hickory is much less common and far less well known than is the shagbark. In its native range, it appears in certain counties of central New York, eastern Pennsylvania, and in parts of Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Nebraska, and Oklahoma. According to "Nut Culture in the United States," * this species attains its "greatest development along the streams of southern Kansas and Missouri, Arkansas and Oklahoma."

The nuts of this species are considerably larger than those of the shagbark, and of much thicker shell, and commonly do not have as plump kernels. Exceedingly few have been propagated.

THE AMERICAN HAZELS (*Corylus Americana*; *Corylus rostrata*)

Shrubs of these two species are often seen growing together throughout the greater portion of the area under discussion. The former (*C. Americana*) is of somewhat the better quality. Neither has been propagated asexually or cultivated to any extent, but it is doubtful if any native species of the nut tree offers a more inviting field for improvement than do these two species of hazels. The same methods of searching out the individuals of superior merit to that of the general average for propagation by grafting and budding by which other nut trees are being improved should be followed with the hazels.

*Published by the U. S. Department of Agriculture in 1896.

THE CHINKAPIN (*Castanea pumila*)

Except as a wild product, this nut has perhaps the least commercial importance of any species mentioned in this paper. A few cultivated varieties are in existence, but the nuts are commonly looked upon by experienced growers as novelties rather than as products worthy of special attention. The species is merely that of a dwarf chestnut growing as a shrub instead of as a tree. It is less hardy than the chestnut, being evidently best adapted to the climatic conditions of the southern portion of the chestnut area and even farther south.

FOREIGN NUTS

THE EUROPEAN AND ASIATIC CHESTNUTS (*Castanea sativa*; *Castanea Japonica*)

It is probable that within the area under discussion greater attention has been paid to the introduction of European and Asiatic chestnuts than to any other foreign species. The former is a moderately strong grower usually, with a low, rather broad top. The latter makes a small tree chiefly of value for ornamental purposes. Both are grown principally from second generation seedlings, which seem better adapted to American conditions than do imported trees.

As in the case with the American sweet chestnuts, the existence of these species in the United States is threatened by the swiftly spreading chestnut blight.

THE PERSIAN WALNUT (*Juglans regia*)

The Persian walnut was among the first nut species to be introduced. The area east of the Rocky Mountains within which it seemed most successful previous to 1896 was described in "Nut Culture" at that time as being "A limited area along the Atlantic Slope from New York southward through New Jersey, southeastern Pennsylvania, central Virginia, North Carolina, and Georgia." Continuing, the same publication said, "The tree endures the winter in favored localities near the coast as far north as Connecticut, Rhode Island, and Massachusetts, but has never been planted there except in a small way."

What was then said is still very largely correct. However, contrary to the construction which might be implied from the wording, there are few commercial orchards of Persian walnuts anywhere east of the Rockies; one, that of Mrs. J. L. Lovett of Emile, Bucks County, Pa., of from fifty to seventy-five trees, approximately twenty years of age, is bearing fully as well as could be expected under its present environment. The trees appear to be entirely unaffected by the severity of climatic conditions, but being seedlings altogether, and uncultivated, the crop production is irregular. Reports from northwestern New York and Pennsylvania indicate that this species may be safely grown in these sections when within the zones which are tempered by the influence of the Great Lakes.

Ordinarily the trees scattered over the Eastern States do not seem able to permanently withstand the severe winters, as in most cases they are not infrequently severely frozen back. In eastern Pennsylvania, Maryland, Delaware, New Jersey, and New York City, the writer recently inspected numbers of fine trees apparently from fifty to seventy-five years of age which showed no indications of winter injury.

The owners seemed to be entirely ignorant of the reputation of the species with respect to its inability to withstand severe weather.

The nuts from many of these trees were of such large size and good quality that a number are to be extensively propagated in the near future.

THE JAPAN WALNUTS (*Juglans Sieboldiana*; *Juglans cordiformis*; *Juglans mandshurica*)

These nuts are of comparatively recent introduction into the United States, having been brought from Asia since 1860. All are generally hardy; the first two are rapid growers, very productive, and serve an excellent purpose as ornamentals, the last is less well known. The nuts of the former two are smaller than those of our native black walnut, of about equally thick shell, usually of no better quality, and as yet are not in great demand on our markets. A few trees, however, should certainly be given a place about the home grounds.

THE EUROPEAN HAZELS (*Corylus avellana*; *Corylus tubulosa*)

Numerous efforts have been made to introduce these species into the eastern states, but owing to the severity of a blight everywhere prevalent with the American species in this section, such efforts have usually met with failure. There have been very few instances in which either species has been cultivated in the Eastern states for any great period of time without being destroyed by the blight.

The future of hazel nut production in this section evidently depends upon the development of our native species or by hybridizing with some of the foreign species.

In concluding this article, it may not be amiss to throw out the following suggestions as to the steps by which all may help in the development of the nut industry:

- (1) Ordinarily, stick to the native species.
- (2) Plant nuts or seedling trees only when budded or grafted varieties cannot be had, but do not fail to plant nut trees of some kind.
- (3) Whenever a tree or shrub is located which because of the superior quality, size, thinness of shell, and quantity of nuts appears to be worthy of propagation, specimens should be sent to the officers of this Association, to the state experiment stations, or to the U. S. Department of Agriculture at Washington, D. C., for examination. (Franks for mailing of such nuts to the U. S. Department of Agriculture without postage will be sent upon application.)
- (4) Nut trees must be accorded the same degree of cultivation and horticultural attention given to other fruit-bearing trees, if commercial production of nuts is to be expected.

A LITTLE BUG COSTS NEW YORK STATE
\$3,000,000 A YEAR

In an article in the current issue of *Farm and Fireside*, a contributor tells how to rid apple trees of the codling moth, and in conclusion says:

"And how much do you suppose New York State alone pays every year for the privilege of having these insects live happy lives in their apple crop? This has been estimated at three million dollars per year; and if New York pays this much for having wormy apples, think of the cost yearly to the whole United States! And all this great loss is entirely unnecessary. If the boys of the farm would take hold of the matter they might save enough fruit in this way to pay their expenses at some agricultural college."

COMMERCIAL FERTILIZERS FOR NURSERY STOCK

A Paper Presented by W. B. Cole at the 1912 Meeting of the Ohio Nurserymen's Association

This subject was assigned to me at the last minute, and put on the last end of the program, not because of what I know about the use of fertilizers, but to give the rest of you, who do know, an opportunity to discuss the subject. If you were to ask me what visible results I have had from the use of the commercial article, I would have to reply that in most cases I have had none when applied direct to growing nursery stock. Yet, I believe that we can profitably use, and in many situations must use, commercial fertilizers. I will attempt to explain my seemingly contradictory conclusions.

Every nurseryman knows that, in order to grow a profitable crop of nursery stock, the soil must be fertile and well supplied with humus, and that the fertilizing elements must be well incorporated in the soil. The building up of exhausted soil is a slow process which cannot be accomplished suddenly by the addition of quantities of fertilizers, either barnyard or commercial. If this is true in general, it is true to a much larger extent when fertilizer is applied to deep rooted tree crops than when applied to shallow rooted grain or grass crops.

There is no question but that we do receive profitable returns from the wise application of commercial fertilizers on farm products. For this reason, we have used this form of fertilizer in growing grain and grass crops, usually applied at time of seeding. Any nursery crop that occupies the ground two years or longer wears out the humus by the constant cultivation required, and a large amount of the fertility is either used up in the growing crop or escapes by leaching away. To place the land in proper condition for another crop of nursery stock is where commercial fertilizer can be used to the best advantage. If nursery stock is followed by a grain crop, as is usually the case, apply enough fertilizer to grow a maximum crop and at the same time secure a crop of grass or clover for plowing under. Repeat these operations until you are satisfied that fertility and humus are fully restored before again planting to nursery stock. Here, I believe, is the most desirable place for a nurseryman to use commercial fertilizer.

I will repeat a few results that I have noticed on both farm and nursery crop by the use of commercial fertilizers. I manured a portion of a corn field, and on July first, the corn on the manured portion was about four feet high and of a dark green color. On the unmanured part the corn was one to two feet high and of a sickly color. I applied about July first nitrate of soda and muriate of potash separately to the unmanured part at the rate of about two-hundred pounds to the acre. This application was followed by abundant rain, and the improvement was almost immediately noticeable. The result was a yield of about ninety bushels of ear corn per acre on the plots treated with manure, nitrate, and potash, while the unfertilized plot yielded about thirty bushels to the acre. The strange thing about this experiment was that

there was little difference noticeable in the use of the three elements of fertility, each producing about the same result, although used on separate plots.

I applied muriate of potash to one row of peach seedlings in August at the rate of one thousand pounds per acre, by opening a trench three inches deep beside the row and scattering the potash in the trench, which was then filled up. Up to this time, the seedlings were small and off color. The soil was sand and gravel and had had no recent applications of fertilizer, although good farm crops had been produced. There were no noticeable results on the seedlings the first year, but the following year the buds were better color and about one foot higher on the treated row. The estimated increase of value of the crop was twenty-five per cent., or at least \$100.00 per acre, while the cost of application, if applied to the whole field, would not have exceeded thirty dollars per acre.

In 1909, we applied complete fertilizer at the rate of about eight hundred pounds per acre, consisting of tankage, muriate of potash, nitrate of soda and bone-meal, to about eight acres of pear, plum, and cherry buds and peach seedlings using one-horse fertilizer drill, each side of the row. This application was made in June, leaving occasionally unfertilized check rows. There were no noticeable results either the first or second year or at the time the stock was dug.

The spring of 1910 we applied nitrate of soda to 15,000 Catalpa Speciosa in June, being the second year after planting. These trees had been cut down in the spring, and at the time of applying nitrate had made a growth of about two feet. Our men were instructed to scatter a tablespoonful about each tree. In about three weeks some of the Catalpa shoots began to fall down, and upon examination we found that some of the nitrate had lodged at the base of the new growth and caused injury to the bark and tissue, so that we lost about five hundred trees in this way. The balance of the trees made six or eight feet growth that season and showed no further injury. While we left no check rows, I am satisfied that the application greatly increased the growth, and had our men been more careful in the application, we would have had no injury.

In the spring of 1911 we planted five acres to blackberries, piece roots. The soil was a moist sand which had been planted to onions for several years, and on which liberal applications of nitrate of soda, bone-meal, and various complete fertilizers had been used, but no barnyard manure. We harvested from this block last fall the largest growth of root cutting blackberries which we ever produced. In this instance, at least, there can be no question that the heavy previous applications of commercial fertilizers constituted the main factor in producing the crop.

In conclusion, I would advise the use of commercial fertilizers on all grain or grass crops with the idea of building

up the soil preparatory to a nursery crop; to apply slow acting fertilizers, such as bone-meal, potash, and acid phosphate, and work thoroughly into the soil to the depth of six or eight inches before planting. I have had the best results by plowing and working the ground two or three times after applying the fertilizer, and before planting cuttings, small fruits, or ornamental shrubbery. If nitrate of soda is used on growing nursery stock or other crop, apply just before season of greatest growth and as near feeding roots as possible. If put on top of the ground, you may or may not receive sufficient rain to carry it down to the roots so as to assist growth. Use nitrates on quick growing rather than slow growing crops, as nitrate of soda does not last long enough in the soil to greatly assist slow growing crops unless many small applications are made.

Do not look for immediate results from the use of potash or bone-meal drilled in in the usual way, as it will take some time for deeply rooted fruit tree stock to find the plant food.

I am satisfied that the matter of using commercial fertilizers must be worked out by each one of us to meet local conditions. I am also satisfied that some soils do not need potash, and if it were applied, no noticeable results would be obtained. The same may be true in some instances to a less degree in the use of other fertilizers. There is no question, however, but that we can grow humus by liberal applications of commercial fertilizer between crops of trees, and that we must do so if we continue to use the same land for nursery purposes for a long term of years.

WANTED—A REAL PARCEL POST

W. A. HENRY

Do you know, Reader, that in carrying packages by mail, our government actually discriminates against its own people, in favor of other nations?

Our post office department at Washington has "conventions," or agreements, with 29 other nations, by which it carries packages weighing up to eleven pounds from any postoffice in this country to any postoffice in those countries for twelve cents per pound. But a package mailed to the next town in the United States must not exceed four pounds in weight, and the carrying charge is 16 cents for each pound.

And as though these discriminations were not enough, our Postmaster-General has made arrangements with British postoffice authorities recently, whereby mail packages up to eleven pounds are carried from any postoffice in England, Scotland, Ireland or Wales to any postoffice in the United States for the following charge:

Up to 3 pounds	30 cents
Up to 7 pounds	55 cents
Up to 11 pounds	79 cents

By this agreement a British subject can send 11 pounds in one package from his postoffice to your postoffice for 79 cents; while you wishing to mail matter weighing 11 pounds to your nearest postoffice in this country, must break it up into three packages of not over four pounds each, and pay \$1.76 postage—a discrimination of 100% against you.

Congress should provide a Parcel Post service somewhat as follows:

(1) Carry packages originating and ending on the same rural route at a nominal cost, because the income therefrom would be nearly all profit to the government.

(2) Establish Parcel Post zones, or circles, of 50, 200, etc., miles radius from each postoffice. Make a low carrying charge within the first zone, because of the short haul and the large volume of business that would result.

(3) Enlarge the weight limit on parcels carried on rural routes to not less than 25 pounds, and elsewhere to not less than 11 pounds.

With a low carrying charge on rural routes and within the first zone, the farmer will be able to order by telephone or postal card and quickly obtain from nearby places of business medicines, drugs, groceries, bread, dry goods, seeds, plants, small implements, tools, bolts, plow points, parts of machinery, etc., also books from the library. In turn he can send to merchants and individuals in nearby cities and villages many of the smaller and lighter products of the farm, garden, greenhouse, poultry yard, etc.

There are now 42,000 rural mail routes, serving over 20,000,000 farmers, operated at an estimated cost of about \$42,000,000 for the year 1912. The stamps cancelled on the mail matter taken from the rural mail boxes the present year will amount to rather less than \$8,000,000, leaving an apparent deficit of over \$34,000,000 for the year 1912. It is hardly fair to call the latter sum the real loss, because the rural routes should be credited with part of the postal receipts on mail the farmers receive. If each rural carrier could earn 10 cents daily by carrying packages, the total returns for 42,000 carriers would be about \$1,250,000 annually. They should earn many times this small sum, besides benefitting all parties concerned. The average outward rural mail load is 25 pounds and the return about 5 pounds; it could and should be ten or fifteen times that. The rural mail carriers have petitioned the government to let them render greater service. No other business is conducted on such narrow lines.

The adoption of the rural mail service was one of the most beneficent acts ever placed on the statute books by congress. To round out and complete our postal system, there is needed a liberal Parcel Post service. Our people can have this from the present congress if they ask for it.

The only efficient way of working is to write letters to members of Congress telling what is wanted, and getting neighbors to write.

Your congressional representatives in Washington are not mind readers. If you want a General Parcel Post law, tell them so. Failing to do so, do not blame them for going contrary to your unexpressed desire.

Fruit stocks are nowadays largely grown in Holland in competition with France, and it seems from the large exports that they are competitors to be figured with. About the outlook, nothing can as yet be said.

THE NATIONAL NURSERYMAN:

Enclosed please find check for \$1.00 and renew my subscription to your excellent paper.
New York.

CLARENCE H. WEEKS.

Doings of Societies

THE NEW YORK STATE FEDERATION OF FLORAL CLUBS

In response to a call issued by the New York Florists' Club for a meeting of delegates representing the various florist clubs and floricultural societies, to form a state organization, the delegates assembled at the New York State College of Agriculture, Cornell University, Ithaca, N. Y., on Friday, February 23. Delegates had been appointed from organizations in Albany, Buffalo, Glen Cove, New York, Rochester, Syracuse, and Tuxedo, and other societies sent letters favoring such an organization and promising support. The meeting was addressed by Dean L. H. Bailey and W. F. Kasting. It was decided to federate the floricultural organizations of the state under the above title for the object of "promoting in all possible ways the art of floriculture, ornamental horticulture and gardening under glass, including educational and civic improvement benefits arising therefrom, among the people of the state of New York."

Each organization holding membership has the right to appoint or elect one delegate for each twenty-five members in good standing.

Two regular meetings are provided, one at Syracuse during State Fair Week and one at Ithaca during Farmers' Week.

The following officers were elected: Wm. F. Kasting, Buffalo, president; Dr. Erl A. Bates, Syracuse, Charles B. Weathered, New York, and E. R. Fry, Rochester, vice-presidents; John Young, New York, secretary; W. A. Adams, Buffalo, treasurer; Prof. A. C. Beal, Ithaca, and George Arnold, Rochester, executive committee.

Committees as follows were appointed by President Kasting: Legislative, F. R. Pierson, Tarrytown, chairman; Wm. T. Logan, Rochester, S. A. Anderson, Buffalo, Charles B. Weathered and John Young, New York. State Fair, George E. Thorp, Syracuse, chairman; Wing R. Smith, Syracuse, A. Cowee, Berlin, Frank H. Traendly, New York, and F. A. Danker, Albany.

Resolutions were passed pledging the support of the organization to secure a state appropriation of \$75,000 for a horticultural building in the State Fair grounds, and also to support the bill now before the Assembly asking for an appropriation of \$50,000 for erecting a range of greenhouses for experimental work in floriculture at Cornell University, Ithaca, New York.

NEW YORK VEGETABLE GROWERS CONVENE

For many years fruit growers, dairymen, nurserymen, and men engaged in other lines of agriculture, have enjoyed the advantages of active organizations holding annual meetings and engaging in other work that is of value to their members. For a number of reasons, vegetable growers have not fallen together in such organizations. Probably chief among these reasons is the fact that their work is highly specialized, and they are centered into comparatively small groups in their particular localities. However, there have been two or three notable exceptions to the rule. The Vegetable Growers' Association of America has been in

existence for four or five years, and is making progress each year. Ontario was perhaps the first commonwealth to organize a body more than local in its scope. However, a year and a half ago a movement was launched, looking toward the organization of a state association in New York. This movement was backed by many of the most prominent and successful growers in New York, and culminated in a meeting which was held at the New York State College of Agriculture in February, 1911. After a year of real progress in the development of the new society, the second annual meeting was held at the College of Agriculture in Ithaca, Farmers' Week, February 20th to 22d, 1912.

The program of the meeting was replete with addresses by some of our best known college and experiment station men, and by thoroughly successful practical growers. Among the subjects that were discussed might be mentioned development of mucklands, plant breeding for the vegetable grower, greenhouse construction and greenhouse crops, and vegetable culture for the fruit grower. Asparagus, cauliflower, celery, cabbage, and onions were each taken up by specialists in separate periods. Prof. R. L. Watts opened a discussion of the good seed question with a very clear statement of the requirements of the vegetable producer, and the facilities which he has for meeting those requirements. The Association is planning to take up definite work in the direction of aiding growers in the solution of this most serious problem. For the present year, little more than a careful survey of the field will be undertaken, but it is expected that another year should see it expanding, and it should later develop into a matter of great importance.

The reports of committees were an especially interesting feature of the week's work. The subjects that were thus presented were transportation conditions, legislation, experiment station work, co-operation, and marketing. In each instance, the chairman of the committee had made a careful investigation of his subject, sparing neither time nor postage. The result was a series of reports of great value. The Vegetable Growers' Association took action urging the United States Department of Agriculture to include celery, cabbage, and onions, in its crop report system, approving bills now before the New York Legislature, looking toward the establishment of demonstration farms and winter schools of agriculture, providing for the regulation and supervision of commission sales and returns, and appropriating for the establishment of experimental greenhouses at Cornell University. Provision was made for attendance by three members of the committee at the conference on co-operation which is soon to be held in New York at the call of the State Agricultural Society.

The old officers were re-elected, as follows: President, C. R. White, Ionia; vice-president, M. H. Holmwood, Orchard Park; secretary, Paul Work, Ithaca; treasurer, C. H. Aldrich, Mattituck.

The members of this Association, which has so recently begun its work, feel that the field is wide open for its labors. Its members are enthusiastic in their interest, and the fact that they are widely distributed over the state, and are working for the development of the Association, gives promise of a wholesome development within the next few years. Perhaps

in the future this society will take its place in influence and in usefulness beside our two great fruit associations.

NEW ENGLAND NURSERYMEN'S ASSOCIATION

The nurserymen of Massachusetts met in Horticultural Hall, Boston, March 12, and changed the name of their organization to that of the New England Nurserymen's Association, including in their constitution the clause, "it shall co-operate with similar organizations in other parts of the country in matters of mutual interest." The Association starts off with about two dozen charter members, the membership fee being five dollars annually. Officers were elected as follows: President, J. Woodward Manning, North Wihnington, Mass.; vice-president, C. R. Burr, Manchester, Conn.; secretary, A. E. Robinson, Lexington, Mass.; treasurer, V. A. Varrick, Newport, R. I.; executive committee, Stephen Hoyt, New Canaan, Conn.; C. R. Fish, Worcester, Mass.; D. A. Clarke, Fiskville, R. I.

Worcester, Mass., was chosen as the place for the next annual meeting.

REPORT OF MEETING OF THE OHIO NURSERYMEN'S ASSOCIATION

The fourth annual meeting of the Association was held at Marietta, O., Jan. 25th. The attendance was not as large as usual for the reason that the location was not easily accessible from the nursery section of the state.

The program was well carried out and from the educational point, the meeting was a decided success. Those contributing to the program were Prof. N. E. Shaw, W. E. Evans, E. W. Mendenhall of the State Inspection Department, and Pres. J. W. McNary, T. J. Dinsmore, Robert George, W. B. Cole and other prominent nurserymen.

The officers for the ensuing year are as follows: President W. N. Scarff, New Carlisle, O.; secretary, W. B. Cole, Painesville, O.; treasurer, A. R. Pickett, Clyde, O. Executive Committee: Robert George, T. J. Dinsmore, T. B. West, Fletcher Bohlender, J. W. McNary.

In memory of one of our charter members, the late John Siebenthaler of Dayton, O., the following resolutions were adopted:

"For the first time since its organization four years ago, the Ohio Nurserymen's Association is called upon to record the death of one of its members. John Siebenthaler of Dayton, one of the older nurserymen of the state and a staunch supporter of our association, died in November, after a somewhat prolonged illness.

Mr. Siebenthaler was a successful nurseryman, although he never sought to do big things, but rather a conservative and safe business. He was a man trusted and respected by all with whom he had business relations. He was a large hearted man who enjoyed extending a helping hand to those in need of assistance, but perhaps the greatest tribute paid to his memory was the universal esteem and love in which he was held by his immediate neighbors. He was such a man as the association may well be proud to have among its membership."

ILLINOIS HORTICULTURAL SOCIETY PROCEEDINGS IN PRINT

A volume of over four hundred pages, these Transactions indicate the important place which the Illinois State Horticultural Society has come to hold in horticultural progress during the half century and more of its existence. So rapidly did its work increase, that within twenty years of the time this parent society was organized, three district organizations were effected in the state. The reports of the Northern, Central and Southern Societies are included in the volume under discussion. The introductory address of Prof. C. S. Crandall brings together valuable information regarding the beginnings of horticultural work and of organized horticulture in the United States. A large number of papers on vegetables and small fruits are presented, as well as addresses by local and out-of-state practical growers of orchard fruits. This volume is sent postpaid to anyone taking out an annual membership in the State Horticultural Society, costing one dollar. It will be sent with twelve back reports of the Society to any public or school library, upon request, the recipient to pay the express charges. If only this volume is wanted for such libraries, fifteen cents may be sent to cover mailing expenses, addressing W. B. Lloyd, secretary, Kinmundy, Illinois.

Business Movements

Mr. P. H. Ronnse, an experienced nurseryman of southern California, has purchased a 41-acre tract at Bangor, near Oroville, Butte County, which he will plant to oranges and olives, and will establish a nursery there.—*California Fruit Grower*.

CRANBERRY NURSERY COMPANY

Bucyrus, Ohio. On February 13th, the Cranberry Nursery Co. was organized with the following officers: President, T. E. Carson; vice-president, John Donnersbach; treasurer, Ed. Geissman; secretary, H. H. Hammer; manager and superintendent, W. H. McCormick. Land has been leased, and operations will be started in the spring.—*Horticulture*.

"THE NEWBURYS"

Mitchell, South Dakota, is appreciative of the important place which the Mitchell Greenhouses and Nurseries have made for themselves in the city. Consequently, when it was desired to convert this industry into an incorporated business, it was possible to dispose of the larger part of \$75,000 worth of capital stock to residents of Mitchell. This was done about February first, and the reorganization of the business was accomplished through the efforts of Ernest F. McKellips and W. W. Reams. It is fitting that this, the largest horticultural establishment in the Dakotas, should bear the name of those who were so largely instrumental, through years of intelligent application, in securing its success. In looking over this firm's catalogue we find many interesting bits of information along plant growing lines which are not very generally known to the buyer, though they are familiar to the grower.

NEW NURSERIES

J. E. Bullard, Z. C. Smith, and Albert N. Charles are the incorporators of the Maywood Nursery Company, at Maywood, Illinois, with a capital stock of \$8,000.

Lewis & Valentine Company has recently been incorporated at Brooklyn, New York, to do a general nursery business; capital stock, \$50,000. The incorporators are Harold C. Lewis, Albert A. Lewis, and Richard K. Valentine.

At Willow, California, the Sacramento Valley Nursery has just been incorporated by W. C. Rice, R. D. Banbury, W. M. Cannarn, John E. Finnal, and F. W. Huggins of Los Angeles, and W. R. Cheesley and F. M. Griswold of Willow. The capital stock is \$100,000.

Mr. Kallen of Kallen & Lünemann, Boskoop, Holland, sailed on S. S. Rotterdam for his annual trip to this country. His address will be care of Maltus & Ware, 14 Stone St., New York City.

The severe frost of last winter killed a large percentage of buds on tree roses, while the severe drought and excessive heat of last summer did a great deal of damage among the low budded rose bushes, not only in Holland, but all over Europe.

Correspondence

SOME MINNESOTA GRAPES

ED. NATIONAL NURSERYMAN:

The Beta, Monitor, Dakota, and Suelter grapes probably originated about 1870, the result of a cross between the Concord grape and a wild form of *Vitis vulpina*. This cross was made by Louis Suelter of Carver County on his farm about twenty-five or thirty miles west of Minneapolis. T. V. Munson, of Denison, Texas, in his "Foundations of American Grape Culture," says that Mr. Suelter sent plants to him of a native white fruited variety of *Vitis vulpina*, which bore small compact clusters, two to two and one-half inches long, of good quality. This was the mother plant, the pollen being taken from the Concord vine. Fifteen seedlings of this lot were saved, according to Mr. Suelter's statement. They bloomed first in 1881. The majority of them, however, suffered from mildew during the blossoming time, and as a result, only five were kept. Four of these five are the Beta, Monitor, Dakota and Suelter. No mention is made of the fifth. Mr. Suelter grew these on his own place at Carver during his lifetime, but never attempted to propagate them.

The Beta grape was obtained from Mr. Suelter and propagated by the Minnesota Experiment Station, and has been quite generally distributed. It is probably the best of the grapes, and will stand our weather conditions the best of any grape yet tried in this vicinity. It is an early maturing variety, generally ripe at St. Paul early in September. In 1911, it was ripe about the middle of July. The berries are medium in size, purple, clusters compact, and frequently shouldered. It is quite common for vines of the variety to yield forty to fifty pounds of fruit. The quality of the fruit is inferior. It is good enough so that, where no other grape is available, it is used in considerable quantities in its fresh state. It is especially desirable in jellies and grape juice, and when thoroughly ripe, may be eaten out of hand. The vine needs no winter protection, but should be severely pruned. It is useful for arbors.

The Dakota, Monitor and Suelter are very similar to the Beta.

Mr. William Pfaender, Jr., of New Ulm, who has spent some little effort in attempting to work out the history of the Beta and these other varieties, has this to say of the Beta and Dakota:

"I have the Beta from three different sources and find that I have two kinds of Beta, one showing its leaves earlier than the other and bearing better, while the one that defoliates later is a more vigorous grower. I find the Dakota defoliates fully two weeks earlier than the early defoliating Beta, and the fruit is sweeter than all the others. It is distinguished from the Beta by its sweet taste and by the fact that, when the berry of the Dakota is picked from the stem, the stub shows a greenish-white color, while that of the Beta is red."

From Mr. Pfaender's observations and trials of Suelter's grapes, he is quite certain that two different Carver grapes have been sent out as the Beta. I think the large majority of the Beta of the state is the earlier ripening variety, and am

quite well satisfied that this is what we have sent out from the Experiment Station.

We have planted a large number of Beta seed, and as a result, have at the Fruit Breeding Station about 500 or more fruiting plants. Among these are some half dozen seedlings that promise to be much better in flavor and bearing qualities than the original Beta, and I am sending you photographs of these.

St. Paul, Minn.

LEROY CADY.

INSPECTION OF FOREIGN SHIPMENTS OF NURSERY STOCK AT PORT OF ENTRY

ED. NATIONAL NURSERYMAN:

This theory could not be advocated by any person having any practical idea of what it would mean. It has been proven impracticable—impossible of execution, and it almost seems like a waste of time to cover the question again.

When this plan was first advocated in 1910, your editor, Professor Craig, came to New York to examine conditions for himself. He took many photographs of the congested New York docks, and his article and photographs in April issue of NATIONAL NURSERYMAN showed clearly that the plan was impracticable—impossible.

The S. S. Floride, which arrived January 11th, last, brought from France 791 cases of fruit stocks—approximately twelve millions of seedlings, besides a general cargo. It takes from four to ten days to get these cases removed from the docks and forwarded to different destinations. Probably four to six arriving steamers in that same week brought consignments of nursery stock.

The S. S. Noordam, which arrived in New York February 17th, brought 1599 cases and bales of nursery stock. The S. S. Ryndam, February 24th, brought 2122 packages, and the S. S. Rotterdam, March 12th, last, brought 1881 packages. This represents three weeks' arrivals from Holland only and over one line.

Steamers bringing these shipments dock in an unbroken line of fifteen miles of docks on the North and East Rivers, surrounding Manhattan Island. Also five miles up the Jersey side, embracing Hoboken and Jersey City docks, also in Brooklyn and South Brooklyn, many miles from the center of New York City.

As your photographs showed, even the largest and newest docks are congested. The cases are often stacked up 25 feet high and overflow into the streets. The docks are nearly all dark, and it is with difficulty that the hundreds of truckmen and freight handlers can get light enough to read the marks and numbers of the cases by which they ship them. Even if there were room there for inspectors, would they be able to locate any plant pests, even with the aid of powerful microscopes?

But the inspectors could perhaps remove the packages from the different docks—separated by many miles of congested shipping streets to a central depot for inspection. There is no building at present in New York large enough to accommodate these shipments, even the new Woolworth Building occupying a square block has only 63 stories, but a new building could be built. Land is cheap in New York and

you can buy three city blocks for around \$200,000,000, and a new building 100 stories could be put up—a little thing like that wouldn't stop theorists.

The stock is mostly compressed in the cases by machinery. Does any sane man think that the inspectors could ever get the same stock back into the same cases or bales? Of course, it wouldn't matter that the varieties were mixed and re-packed in Government style; for the stock would be as dead as Caesar before it was released. Would any American Nurseryman pay two cents on the dollar for such stock, and would any French firm ship stock to go through this farce unless he had the cash first?

And what good would such a law do? Would it benefit the nurserymen, florists, fruit growers, farmers, or the men in the street? What good does this official inspection do anyway? In my opinion, the only good such a law would do would be to provide some new fat jobs for inspectors and to give me the chance to take a year's vacation.

New York.

McHUTCHISON & Co.

FRUITS AND NUTS IN THE FOREIGN TRADE OF THE UNITED STATES

Exports of fruits and nuts from the United States aggregated more than \$200,000,000 in the last twelve years, reaching their highest record in the calendar year just ended, with a total of \$29,000,000, or more than three times as much as a decade earlier. The foregoing sentence summarizes the results of a compilation just prepared by the Bureau of Statistics, Department of Commerce and Labor, suggested by the large exports of fruits and nuts in January of the present year, which aggregated \$2,537,432, or 50% in excess of those of the preceding January, giving promise that the high record exports of fruits and nuts last year will be exceeded by those of 1912.

Not only are the exports of fruits and nuts increasing, but their growth is far more rapid than that of imports under that head. In 1901, imports were more than twice as much as exports; last year they were but 50% more than the exports of similar articles. The movements in each at intervals since 1901 are shown in the following table:

IMPORTS AND EXPORTS OF FRUITS AND NUTS		
Calendar Year	Imports	Exports
1901	\$20,177,802	\$ 8,279,213
1904	24,385,220	17,992,719
1907	40,455,067	15,199,585
1911	44,164,650	29,153,123

The principal exports of fruits and nuts in the calendar year, 1911, consisted of apples, \$9,000,000; prunes, \$4,500,000; oranges, \$3,000,000; canned fruits, \$3,750,000; raisins and other dried grapes, \$1,333,000; pears, \$750,000; peaches, \$500,000; and peanuts, a little over \$250,000.

The leading imports under the head of fruits and nuts in 1911 included bananas, \$14,750,000, or over one-third the total; walnuts, \$4,666,000; almonds, \$3,250,000; lemons, \$3,000,000; grapes, \$2,333,000; cocoanuts and copra, each about \$2,000,000; olives, \$1,500,000; and pineapples, figs, and filberts, each about \$1,000,000. These figures are exclusive of \$2,500,000 worth of pineapples shipped into continental United States from Hawaii and \$2,250,000 worth of oranges, pineapples, and other fruits and nuts shipped from Porto Rico last year.

The distribution of exports and the sources of imports of fruits and nuts are shown in the December number of the Summary of Commerce and Finance, recently issued by the Bureau of Statistics. Our exported apples, dried, go chiefly to Germany and Netherlands, those green or ripe mostly to the United Kingdom; dried apricots, chiefly to Germany, England, France, and Netherlands, and oranges, nearly all to Canada. American prunes are exported in large quantities to Germany, Canada, and the United Kingdom, other European countries being also important markets for this and various other fruits of domestic production.

Our imported bananas are derived chiefly from the Central American States and Jamaica, and smaller quantities from Cuba and Colombia. Greece supplies practically all the 35,000,000 pounds of currants imported, and European Turkey the preponderating share of the approximately 20,000,000 pounds of figs and dates, respectively. Spain is the sole important source of imported grapes, of which nearly 2,000,000 cubic feet were imported last year. Italy holds a like position with reference to lemons, all but 250,000 pounds out of 130,250,000 pounds imported being from that country. Spain, Greece, and Italy, are, in the order named, the leading sources of imported olives. Despite the increasing domestic production, considerable quantities of oranges are still being imported from Jamaica, Mexico, Central America, Japan and Italy. Cuba supplies nearly all the imported pineapples; Spain over half the imported raisins, with Asiatic Turkey and Russia also important sources of supply. Europe, chiefly Spain, Italy, and France, supplies most of our imported almonds; the British West Indies, most of the cocoanuts; the Philippines, French Oceania, and the Straits Settlements, most of the copra; Brazil, practically all the cream nuts; Japan, Spain, France, the Dutch East Indies, and China, most of the peanuts; and France and Italy, most of the walnuts imported into the country.

Catalogues Received

- Youngers & Company, Geneva, Neb. Bulletin No. 3.
 Chase Brothers Company, Rochester, N. Y. Bulletin No. 5.
 Yager Nursery Company, Fremont, Neb. Surplus list for spring.
 C. R. Burr & Company, Manchester, Conn. Special wholesale list, Bulletin No. 3.
 C. G. Curtis, Callicoon, N. Y. A very neat catalogue of native plants in carload lots.
 The Mt. Carmel Forestry & Nursery Company, Mt. Carmel, Conn. Catalogue of Forest Trees.
 Conard & Jones Company, West Grove, Penn. Trade list of Roses, Cannas, Shrubs, and Miscellaneous Plants.
 W. N. Scarff, New Carlisle, Ohio. Novelty Circular, advertising the St. Regis Everbearing Raspberry, in the form of a Night Letter.
 Kallen & Lünnehan, Boskoop, Holland. Catalogue of Plants and Nursery Stock, for the general wholesale trade. Prices in this catalogue are quoted in American currency.
 A. E. Robinson Company, Lexington, Mass. Handbook of Trees and Plants. Profusely illustrated, an attraction on every page.
 Huntsville Wholesale Nurseries, Huntsville, Ala. Bulletin No. 1, March 15.
 Fraser Nursery Company, Huntsville, Ala. Surplus List, March 14th.
 Horsford's Nurseries, Charlotte, Vt. 1912 Catalogue.
 Chase Nursery Co., Huntsville, Ala. Bulletin No. 3, Feb. 20th.
 E. W. Wooster, Junction Fruit Farm, Ellsworth, Me. Blackberry Plants.
 Peter Schott, Knittlesheim, Germany. "Forest Seeds and Forest Trees."
 Rockmont Nursery, Boulder, Colo. D. M. Andrews. General Catalogue for 1912.
 Winfield Nursery Co., Winfield, Kans. Wholesale price list. Bulletin No. 1 for Spring, 1912.
 The Wm. H. Moon Company, Morrisville, Penna. "Moon's hardy trees and plants for every place and purpose."
 Herbert Jackson, Portland, Me. Wholesale trade list of Hardy Evergreens, Deciduous Trees, Shrubs and Vines, etc.
 The Continental Nurseries, Franklin, Mass. High Grade Stock at Rock Bottom Prices.
 Chanute Nurseries, Chanute, Kans. Surplus and want list.
 Fremont Nursery, Fremont, Ohio. Catalogue of Fruit and Ornamental Trees, Shrubs, Vines, Roses and Plants.
 Willowdale Nurseries, Kennert Square, Penna. Wholesale trade list.
 The Morris Nursery Co., West Chester, Penna. Trade list.
 J. H. Skinner & Co., N. Topeka, Kans. Wholesale price list.
 Clinton Falls Nursery Co., Owatonna, Minn. Surplus list Bulletin 3.
 Thos. Meehan & Sons, Dresher, Penna. Trade list.
 W. N. Scarff, New Carlisle, Ohio. Catalogue of Fruit and Farm Seeds.
 Rosedale Nurseries, Tarrytown, N. Y. Wholesale trade list.
 Stark Bros. Nurseries & Or. Co., Louisiana, Mo. Condensed Stark Year Book.
 D. Hill Nursery Co. Inc., Dundee, Ills. 1912 Catalogue and Planting Guide. Also their wholesale catalogue.
 Leesley Bros. Nurseries, Chicago, Ills. Wholesale catalogue for Spring, 1912.
 J. G. Harrison & Sons, Berlin, Md. General Catalogue.

Our Book Table

THE MODERN CULTURE OF SWEET PEAS, Thomas Stevenson. Pub. by The Cable Printing & Pub. Co., Ltd., London. 5¾ x 8¾". Illustrated. Price, \$.75.

The amount of literature on sweet peas in the form of entire books devoted to the subject and giving careful directions for the culture of this flower is lamentably small, considering what a favorite it is, alike in the humble garden of the cottager and in the landscape-architect-planned creation of the wealthy country gentleman. The volume under consideration is, therefore, aside from its own merits, a most welcome addition to sweet pea literature. Mr. Stevenson's book is written from the standpoint of a personal experience covering nearly twenty years; and it is on knowledge gained in this manner that he dwells, rather than on a historical dissertation which would possess little value or interest to the grower whose chief concern is to produce vigorous plants, prolific of bloom, and free from pests.

Starting at the beginning, the book discusses soil and its preparation, time of sowing, and subsequent care, then takes up the subject of sweet peas for exhibitions, for garden decoration, for market and indoor use, and includes a chapter on enemies. There are a dozen illustrations, six of them being colored plates of as many varieties of sweet peas appearing in 1910. The book is both up-to-date and practical.

THE AMERICAN BOY FOR APRIL

"Marcus Aurelius Fortunatus Tidd was fifteen years old and weighed one hundred and eighty pounds. He reminded one of those figures which are drawn solely with a pair of compasses."

That is the description of the fat boy about whom Clarence B. Kelland has written an April Fool story. The tale is just about as funny as is the subject and you cannot help laughing at the way in which Marcus Aurelius turns the tables on Binny, Tallow, Plunk, and the rest of the conspiring jokers.

Ralph Craig, the world's champion sprinter, contributes an interesting article on "How to Train for the Hundred and Two-Hundred-Twenty Yard Dashes," and Cyrus Townsend Brady's splendid serial, "The Young American Treasure Hunters," is continued in this issue. Besides these features, there is an attractive array of short stories, special articles, and the usual instructive and interesting departments. Don't fail to get this number. \$1.00 a year.

Detroit, Mich.

THE SPRAGUE PUBLISHING COMPANY.

P. A. Dix, president of the Pacific Coast Association of Nurserymen, is planning for at least one Pullman coach load of nurserymen from the Pacific Coast to attend the meeting of the American Association, to be held in Boston, Mass., June 12-14.—*The Northwest Horticulturist*.

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Partial View of Persimmon Trees in Nursery, shown in our Retail Catalogue, page 23.

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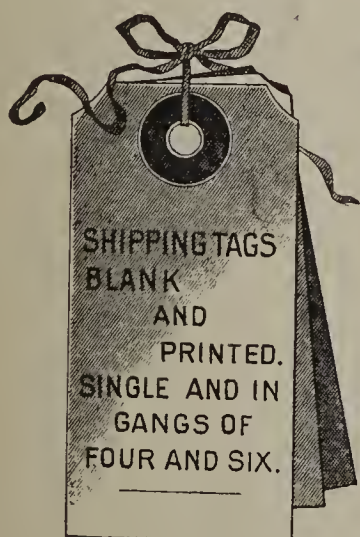
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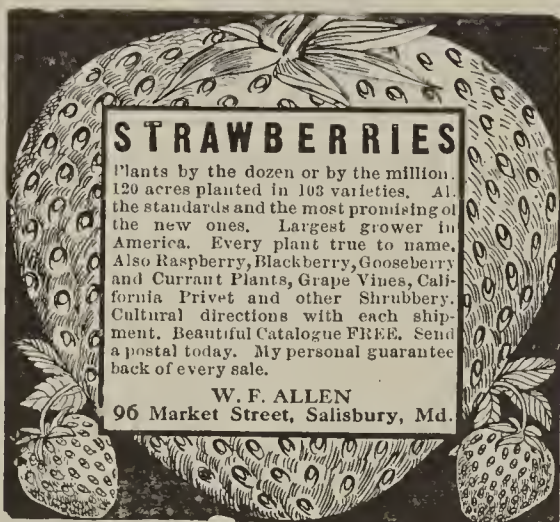
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Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
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that can be produced by suitable soil, climate and expert knowledge.

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TREES

CHERRY—3-yr., 2 inch up, 7 to 9 feet, for high-class retail trade

APPLE—1 year and 2 year.

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A general variety of Orange and Grape Fruit Trees.
Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

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AVERAGE RAINFALL helps; we are surrounded by the ocean on three sides, and we get a lot more rain than some other localities do. The salt sea-breezes help keep our stuff clean and healthy, too.



An average block of Harrison Fruit Trees. You can please YOUR Trade with stock like this.

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THE NATIONAL NURSERYMAN



MAY, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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15000 **Figs**, mostly of the Celeste and Lemon varieties.

20000 **Peach**, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.

25000 **Plum on Plum**, Abundance, Burbank, Wickson, Red June, Gonzalez, and other leading sorts. Sizes $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ and 1 inch.

10000 **Roses**, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.

6000 **Biota Aurea Nana**, sizes 18 inches up.

10000 **Biotas and other Conifers**, 12 inches and up. Conifers can be balled or shipped with naked roots.

25000 **Chinese Arborvitae Seedlings**, 2 and 3 year, 6 inch to 3 ft. sizes.

5000 **Muscadine Grapes**.

20000 **Trellis Varieties Grapes**.

70000 **Camphor Trees**, sizes 1 to 3 ft.

3000 **Pot Grown Eucalyptus**, sizes 3 to 5 ft.

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A general variety of Orange and Grape Fruit Trees. Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

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Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and
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STANDARD PEARS in assortment DUCHESSE DWARF PEARS BOURGEAT QUINCE
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ELMS...

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Ellwanger & Barry

MOUNT HOPE NURSERIES

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AND NOW,—

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PEACH PLUM

A Fine Block of
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ORNAMENTAL TREES SHRUBS
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TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
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63 Years

700 Acres

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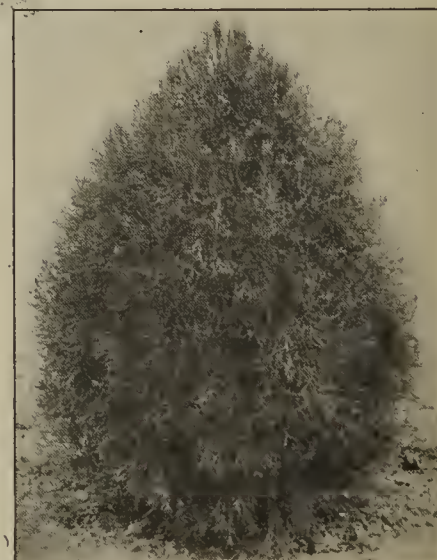
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Established 1856. Over 450 acres in
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DECIDUOUS
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Used and Recommended by Leading
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The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

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FRUIT TREES,
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HARDY PERENNIALS. A most extensive assortment and an immense stock of the leaders, such as Anemone Japonica, German and Japanese Iris, Hardy Phloxes, Pæonies, etc.

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BOX WOODS AND BAY TREES. A splendid lot of commercial sizes, of various forms of exceptional quality.

All the above, as well as a full line of other seasonable plants, seeds and bulbs, are described in our Current Wholesale List which we shall be pleased to mail to those in the trade upon request. If you do not receive it regularly write.

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Have you seen and examined the quality and finish of our

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This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

The Denney Tag Co.

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Association of Nurserymen will be held
June 12, 13 and 14, 1912.

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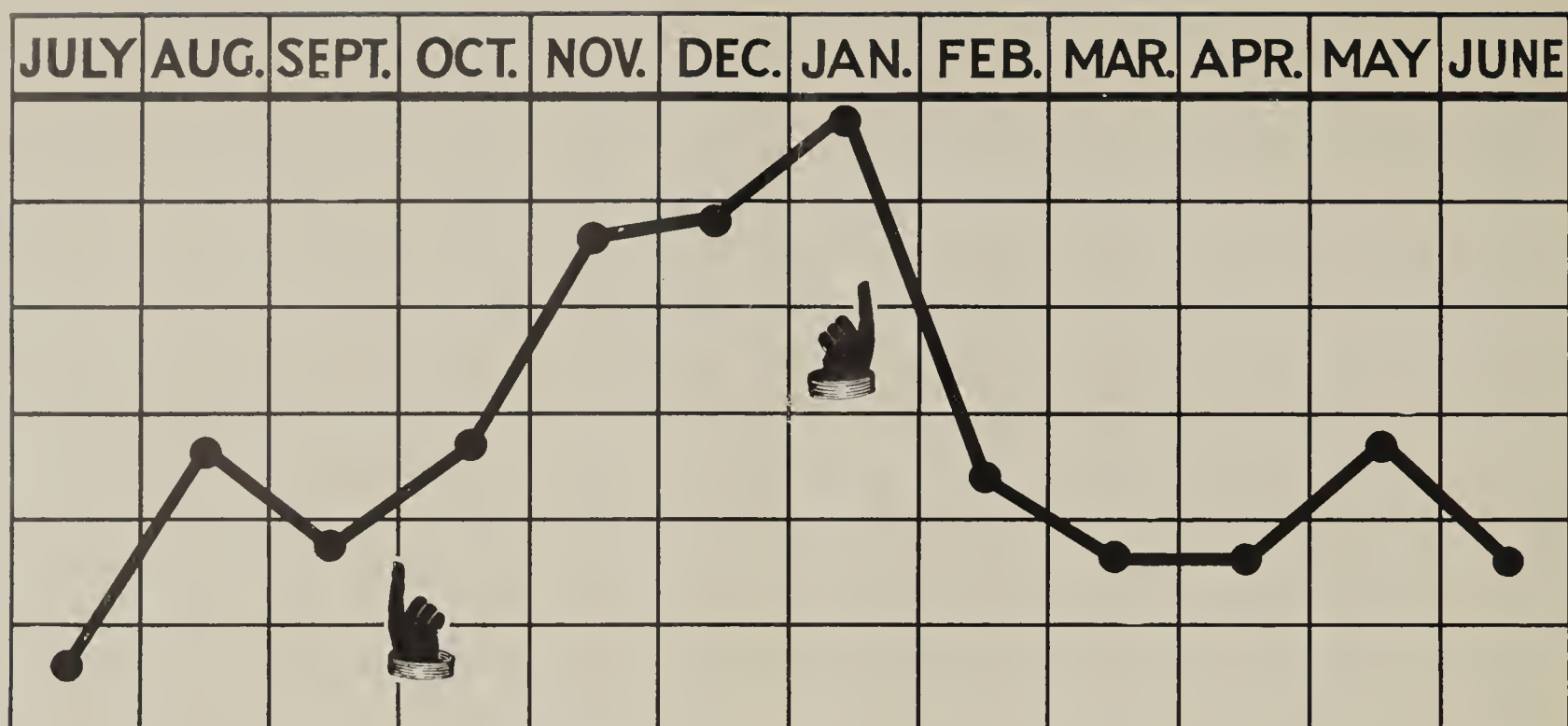
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SAVING TROUBLES



THAT LINE represents troubles—our troubles especially. The high point is the “peak” of our producing load, when we had too much to do to be at all happy. The low point is the “valley” of our production, when there was not enough doing to keep us busy.

Yet because ours is a service of experts—in publicity, photography and printing—we have to keep half busy in October the men who struggle to accomplish the great “peak” production in January. The cost of one product all the year round is higher, of course, because these good people must be paid in “valley” times just as in “peak” times.

These troubles can be mitigated, and our costs reduced, if our friends will help. We will pay them for helping, too. And some who wanted in on the January “peak,” and were refused, can get in economically and to great mutual advantage by simply doing earlier some things that must be done anyway.

Now, right now, is the time ***we pay well*** for advance information and early contracts for Fall or Spring doings in catalogues and selling arrangements. Those who are interested in the notably efficient McFarland selling service will not lose a day in collecting from us by early discussion of 1912-13 problems. ***NOW, not much later.*** This year, the order books will close months earlier than last year!

THE MCFARLAND ORGANIZATIONS

MOUNT PLEASANT PRESS

HARRISBURG, PENNSYLVANIA

J. HORACE MCFARLAND COMPANY
Constructors of Catalogues

THE MCFARLAND PUBLICITY SERVICE
Builders of Business

Good color work ***pays*** the horticultural tradesman who uses it in his catalogue—pays better each year. This kind of color-printing can't be done, even in the well-equipped McFarland plant—when the production is at “peak” pressure. It can be turned out, to the complete satisfaction of printer and customer, during the “valley” period. The Beckert cover on the other side is an example of how well we do color work in the summer and early fall.

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., MAY, 1912

No. 5

DANSVILLE NURSERIES DURING THE WINTER SEASON AS DISCOVERED BY AN AMATEUR

Specially Prepared for the National Nurseryman

By E. L. BERNAYS

A GREAT FRUIT TREE PRODUCING REGION

While the nursery industry in Geneva and Newark is concentrated in the hands of a few large growers, we find that the opposite holds true in Dansville, New York, for here the industry is in the hands of as many as one hundred twenty-five men. In fact, we find that a local nurserymen's

nursery stock. Its soil is good with good sub-drainage, doing away with the tile drainage required in Geneva and other regions. Even the heavier hill soils are adapted to the growing of stock. The climate is advantageous, for the hills act as protection from disastrous winds. There is no San José scale present, nor are other plant diseases in evidence.



THE PLANT OF THE GEO. A. SWEET NURSERY CO.

organization exists in the town, and although there are conflicting opinions as to the amount of good that it accomplishes, the fact remains that it is a hopeful sign of the times and deserves to be encouraged.

Dansville and the surrounding nursery region is situated in the Genesee Valley, and the three thousand acres devoted to the nursery industry here are principally in fruit. Dansville has artificial and natural advantages for the raising of

Insect pests are very few. The nursery inspection has been thorough and rigid. Mr. Morey, Mr. Maloney, and other nurserymen believe that it has been due to the efforts of Mr. Barden, the state inspector, and his assistants that the scale has been kept out of this region. Mr. Barden, during his administration of ten years, has destroyed hundreds of thousands of cions and stocks which have come in with the scale on them. The railroad facilities afforded Dansville

are good. There are two roads, the Dansville and Mt. Morris railroad and the Delaware and Lackawanna. Most of the larger firms have sidings on the D. and M., while the freight rates to western points are advantageous, in that they are the same as from Rochester.

Much stock is grown on contract, doing away with storing in the winter, but there are four large modern storage plants.

LEADING FIRMS

THE GEORGE A. SWEET NURSERY COMPANY

LONG AND FAVORABLY KNOWN

The George A. Sweet Nursery Co., one of the larger companies in Dansville, established in 1869, has built up a large wholesale and retail trade in fruit trees. In the retail trade the cash with order is followed closely, and no agents being employed, the well printed catalogue and advertising are relied upon to secure business. The dealers are generally preferring retail trade to wholesale trade in Dansville, and the reason is seen in the fact that the retailer need not make himself dependent upon a few men, but can rely upon multitudes for his trade.

FASHIONS IN FRUITS

There are about 170 acres in fruit. Apples are a specialty, with stress laid upon the popular red varieties, the McIntosh and the Baldwin, and also upon the Greening. The McIntosh seems to have sprung into sudden demand, and the nurseryman finds himself unable to cope with the situation. There has also been a strong demand for the Montmorency and the Morello cherries this spring. In the sweet cherries, the Windsor for the black and the Napoleon for the white have proven leaders. In plums, two year old Burbanks held well to the fore. Of the other fruits, no special varieties were emphasized. A few ornamentals are raised, of which the poplar is most prominent.

Careful attention is paid to the grading of all these trees in four grades with a special heavier grade for city and suburban trade, in which New England is the greatest buyer.

STORAGE

A storage house, a large frame structure 100 feet square, is part of the winter equipment of the firm. It has a shed roof, lighted by sky lights, which are darkened in the winter, and is frost proof, constructed as it is of boards with paper between them and three or four air spaces. The stock is well arranged, stacked in bundles which reach up to the ceiling, and forming alleys between the stacks. The roots are well covered with two layers of excelsior, the inner wet, the outer dry to absorb the moisture and prevent mildew. The building is lighted by electricity, has no artificial heat, and is supplied with city water. Mr. Sweet, when he observed his well stocked store house, could not but be reminded of the good old days, just fifteen years ago, when all the stock was heeled and trenched in the field and dug out in the spring—a thing never practiced nowadays.

A fumigating house is attached to the storage house, but fumigation is not practiced except at the request of the customer, because San José scale does not exist in that region.

About the house packing boxes were being made, while in a work house six men were trimming French imported apple stock. Necessity, the mother of invention, evidently lives in Dansville; for we find a machine here, devised by Mr. George C. Sweet, which is known as a willow twister and which is used to tie knots in willow stems. These are used to tie up the bundles of roots.

Mr. Sweet expressed himself as being proud of the way the state was running things in the nursery inspection department and hoped that "honest men and true" would continue to serve under the new commissioner.

MOREY & SON

Morey & Son is an old nursery firm of Dansville, started in 1863, formerly strictly wholesale but lately branching out into the retail catalogue business, as so many Dansville firms have done. It comprises 200 acres in nursery stock.

Fruit trees are dealt in entirely and these are shipped in car load lots as well as in box orders. The specialties are plums and cherries. The latter are principally on Mahaleb stock, because the Mazzard has proven a failure. There has been a great demand for Morello and Montmorency cherries all over the country, and this has been due to the great money making qualities of these two varieties. The Burbank and the Japanese plums have been very good sellers, and as many as 80,000 Japs were sold to the South and the West last year. The shortage of the red varieties of apples has been felt here as everywhere else—the McIntosh was at a premium.

Everything is budded in the field except the apples, which are grafted in the winter on French stock bought and graded in France. The labor in the grafting room is specialized, six men grafting and two winding, and the results of their joint labor stored over the winter in large boxes filled with sawdust.

Large storage facilities are required by the business, and a 100 feet square and about 20 feet high storage house has been built. The light is gotten by means of rows of windows, a saw tooth roof with six teeth. There are disadvantages with this roof, in that it is hard for the water to drain off. The stock of over 200,000 trees is ridged up to the roof, with very narrow alleys between the ridges, and very closely packed. Two layers of excelsior cover the roots of the trees. The lower layer is moist excelsior, while the outer, thicker layer is dry and is for the purpose of absorbing moisture and preventing mildew. The whole sides of the alleys form a steep excelsior wall, and this is in keeping with Mr. Morey's belief that the more packing used the better will the plants keep. At the side of the well ordered stock is a packing space, in which a charcoal stove is allowed to smoulder in the very cold weather. Electric lights are conveniently placed, while another modern improvement is a derrick, which moves the large packing boxes from any part of the floor to the door, leading directly into the freight car on the private siding. Running water from hydrants scattered at central points is a great protection in case of fire. We can see from these appliances how up to date the modern storage plant is.

The labor problem is no easy matter. In the packing room about seventy-five men are required at the height of the season, while in winter about twenty are kept at work making boxes and doing the other necessary labor around the plant. The common laborer gets two dollars a day, while the expert grafter and budder, kept throughout the year, gets fifty cents more per day.

Although competition has been strong, selling has been very close, only one surplus list has been sent out thus far and business looks as good as it has all through the last ten years. In this connection, Mr. Morey believes that the local association has done good work in the trade. It has promoted friendship among its members and discouraged substitution. Meetings have been held every month during the selling season. The state inspection was also praised strongly for its good work in keeping the scale out.

KELLY BROTHERS

Kelly Brothers are wholesale nurserymen of Dansville, and have about 100 acres under cultivation in a general assortment of fruit, specializing in apples and peaches. The land is part valley and part hill land. The former has proven itself to be best for apples and peaches, while the hill land has been found most desirable for pears and plums. Insect pests and plant diseases are of rare occurrence.

Of the apples the Baldwin has proven the best seller, and of peaches the Elberta is the star, while in plums the German prune leads. In cherries the Mahaleb stocks are used, not in preference to Mazzards, but because the latter is so hard to procure.

The business during the last years has been very good. Fruit has brought large prices to the farmer and he in turn has been encouraged to buy nursery stock. Goods were sold in carefully graded carload lots last year. The prospects for the next year's business are as bright as they ever have been at this time of the year. No damage has as yet been done by the very cold weather, and apples and peaches seem to be much in demand.

Kelly Brothers have just completed one of the most modern and up-to-date complete storage houses, 80 x 132 feet and about 20 feet high. It is built of hollow tiles and brick, and because of its three air spaces, is frost proof. It requires no artificial heat. It is lighted by electricity, and has running water in it. A special feature of the construction is the ventilating doors at the ends of each alley near the floor. These are opened when the weather is not inclement to allow thorough ventilation. Not a little of the success the Kellys have had in the storing of their stock is attributed to this means of ventilation. This storage building is the largest in Dansville.

Part of the space in this storage building is rented, as Kelly Brothers have sold very short this fall. It has been of great use to them in their packing at that time, enabling them to send out their stock in all sorts of weather. A siding of the Dansville and Mt. Morris railroad to the storage house greatly facilitates shipping.

Five men are kept busy in the work room all winter grafting standard varieties on western stock, which have been found by experience to be just as good as the French stock and particularly free from crown gall.

When Mr. Kelly was asked whether he believed that nurserymen ought to specialize on a few of the standard varieties, he said that he believed in not specializing since this concentration would lead to an oversupply of certain varieties and a consequent fall in the market price.

FRANK HARTMAN'S NURSERY

Mr. Hartman of Dansville has 36 acres of land in nurseries and specializes in fruit. Similar to a number of other Dansville nurserymen, he sells all of his stock at wholesale in the fall, which enables him to dispense with storage houses during the winter months.

A work house is, however, maintained during the winter, and in this four men are continually engaged in grafting a varied assortment of apple varieties on western stocks, which he finds to be particularly good. The finished grafts are stored in a cold cellar until the spring, in closely nailed boxes, filled with pine sawdust. This is said to have a healing effect on the grafts, allowing callusing to go on. The favorite apple is the Baldwin and more of this variety is sold than any other.

C. W. HARTMAN'S ESTABLISHMENT

Mr. Hartman's nursery is situated some miles out from Dansville, and consists of about 50 acres under cultivation. Fruits are his specialty, with cherries, pears, plums, quinces grown in this descending order.

No storage facilities are necessary, as most of the stock is generally sold at wholesale in the fall. Everything was disposed of this last year, and the prospects for the coming season look just as good.

Of the pears the Kieffer, the Bartlett, and the Anjou are the most popular. In apples the standard varieties are supplied, while in cherries the general varieties grown on Mahaleb stock are for sale.

Mr. Hartman reports little injury from insect pests or plant diseases. Slight attacks of crown gall and some black aphid on cherries were noted. Spraying is practiced as a prevention against leaf blight, but there has been little injury on account of it.

JACOB UHL, A PIONEER

Jacob Uhl is one of the oldest nurserymen in the business in Dansville, and with the exception of four years' service in the Civil War has been continuously engaged in it ever since he can remember—a veteran in two senses of the word.

Mr. Uhl has built up a wholesale trade in fruits, and makes apples his specialty. The red varieties are sold in the East, while few are disposed of in the West, owing to the strong competition of the western nurseries. Owing to close sales in the fall, no storage facilities are needed.

The stock used for apples is French stock, bought from the New York agents of French firms. Five men are kept at work during the winter, trimming, bundling, and storing the French stock. Only the best, heaviest stock is secured from across the water, and this is the most economic method in the end; for some of the side roots of these stocks can be saved, grafted, and will do well. After the stocks are trimmed, they are stored in sand and taken out in the spring, to be planted and later budded in the field.

Mr. Uhl reports that business as a whole was very favorable in the last ten years, and that the present conditions look like a continuance of this era. So good has the business been that in the last few years no surplus stock has existed, to be burned.

As to the general trend of the want and the surplus lists year after year, the red varieties of apples, the German prune, the Burbank and the Abundance have been pretty generally on the want list, while the surplus lists have been rather empty.

STARK BROTHERS

Stark Brothers, whose main plant is in Missouri, maintain an office and nurseries and a 90 by 40 feet storage house at Dansville. Two hundred and fifty acres are kept in fruit,

wrapped the grafts with ordinary number 13 cotton after they were finished. This is a better and a quicker method than the old way. A man can wrap seven to eight thousand grafts in one day. The cotton is said to be more servicable than the grafting cord because it wraps closer and rots more quickly. Of the grafts sixty per cent or more can be counted on to take.

Business prospects are good, and if business is in keeping with last year it will be all that can be desired.

MALONEY & WELLS COMPANY, DANSVILLE

Maloney & Wells Company, at present Maloney Brothers, owing to the withdrawal of Mr. Wells, have been in business in the Dansville section for twenty-six years. The



MALONEY & WELLS COMPANY'S FROST-PROOF COLD STORAGE, ERECTED 1911

but little, except a few apples and bush fruits, are kept in storage this winter, as the selling was very close last fall.

The main work of this plant at present is the making of apple grafts. Fourteen men are kept at this all winter, with the intention that over 500,000 be finished. Of these, over 100,000 are Stark Delicious. Other prominent varieties are the Jonathan and the York Imperial.

The seedlings used for stocks are French grown, as these are believed to serve the purpose better than the Western grown stock, which are thought to be less hardy, and more liable to crown gall and aphids. The grafts are put into excelsior in boxes, which are then stored till spring, in the storage house.

A GRAFT WRAPPING MACHINE

An innovation observed in the grafting room was a machine designed by the general foreman of the firm, which

company was founded in 1885 and was incorporated with a capital of \$60,000 in 1911. Over 250 acres are in nursery land and the larger proportion of this area is devoted to apples. Peaches, plums, cherries, and pears follow in that order. There is a small line of shrubs, ornamentals and evergreens. The business is both wholesale and retail. The retail end of the business is done on the cash with order basis, and the only agents employed to secure business are advertising and catalogues.

Apples and peaches were especially pushed during the last year. The Duchess and the McIntosh are generally very popular, while the Stayman Winesap seemed to hold the floor in Pennsylvania. In plums the heaviest call is for the Abundance, while the Burbank sells well. The supply of cherries for the ensuing fall, thinks Mr. Maloney, is not as large as it was last season or as it was in the past few seasons.

Prospects for the ensuing year seem generally to be very good; for when the winter set in the ground was in good condition, and the only danger now is that the fruit may be damaged by frost in the early spring. In this connection of profits and prospects, Mr. Maloney believes that the nurserymen should concentrate on a few varieties, so that they would not have such hard times disposing of odd lots at the end of the season. And Mr. Maloney believes that not the cheapness of these varieties but their high quality should be the main selling argument. In this connection, Mr. Maloney practices very careful grading and he finds that this pays.

The storage house of Maloney Brothers is a new building of tile and brick, frost proof. The dimensions are 80 by 100 feet by 22 feet high, and the walls are two feet thick. The building contains 15,600 square feet of ground space, is lighted by electricity, and connected by a private switch with the Dansville and Mt. Morris railroad. The ventilation of the storage house is controlled by windows on the sides at the top, as well as by small doors near the bottom at the ends of the alleys. These doors are opened when the weather is not inclement, and a draught is allowed to circulate through the alleys. This system, the firm believes, has had a lot to do in wintering the stock as well as it has wintered. There is no artificial heating. The house is kept dark through the winter by covering over the windows, which extend in a ridge at the top of the building.

The trees are arranged in stationary "bents," which are labelled and arranged carefully. The alleys are alternately three and four feet wide. The fruit stock is packed in the usual way of Dansville, with two layers of excelsior, one damp, the other dry. Privet is stored with the tips instead of the roots exposed. These are buried in sand.

Packing is done at the side of the stored stock, and here also are the grafts stored in boxes. They are made in a small building adjoining the main storage house. All the stock used is French stock. The cions are grown in the field. Over 300,000 have already been made this season.

Spraying of the nursery stock is seldom practiced, while fumigating is done only at the request of the customer.

REILLY BROTHERS

Reilly Brothers is one of the firms of nurserymen in Dansville that from the small beginnings of a partnership of two young men has grown to be a large catalogue trade in fruits and ornamentals.

The Reilly Brothers have 140 acres under cultivation and specialize in fruits, besides having an assortment of shrubs and ornamentals. Of apples their most popular apples are the Red McIntosh, the Baldwin, the Spy, the Wealthy, the Duchess, the Wagener and the Greening. Some of these varieties were in such demand that orders for them had to be turned away last year. In the plums the Burbank is the best American seller, the Wonder the best Japanese seller, and the German Prune the prime European market product. In peaches the Elberta leads, with the Champion and Niagara following.

During the winter nine men are kept busy in the work house trimming French roots as they come in direct from Détriché in Angers, France. Some of these roots are grafted,

but three times as many are budded as are grafted. The cions used for grafting are either cut off the growing trees or are bought when the variety is particularly scarce. Both the grafts and the roots are stored in a cool cellar till spring.

The stock of the Reilly Brothers is extensive. At present they are storing in Kelly Brothers' storehouse over 300,000 trees, which are there arranged in stacks with that due regard to arrangement and labeling which the best nurserymen show.

The trade last year was exceptionally good, and this year there are already more orders than there were at the same time last year, which is a bright outlook.

The trade policies of the Reilly Brothers undoubtedly have a lot to do with the phenomenal growth of their business. They conduct only a cash business, whether on delivery or accompanied with the order. This does away with what might otherwise be a loss. They make up special offers, which are prepared before the rush season starts and can be promptly shipped away. They are wide awake to the possibility of judicious advertising and encourage early buying by offering a discount if orders come in before a certain date. They get out a well illustrated and well printed catalogue, which is a great factor in the gaining of trade, and they practice the modern principles of business management and apply them to their business, as when they buy two car loads of lumber all the way from Pittsburg because it is cheaper there than anywhere else.

HEADQUARTERS AMERICAN ASSOCIATION OF NURSERYMEN

June 12, 13, 14, 1912

HOTEL SOMERSET

FRANK C. HALL, Manager

EUROPEAN PLAN

COMMONWEALTH AVENUE, CHARLESGATE EAST AND
NEWBURY STREET, BOSTON, MASS.

Commonwealth avenue is the most aristocratic thoroughfare in New England; over two hundred feet in width, with fine shade trees and elegant residence on either side.

The "Somerset" is both a family and transient hotel, and is favored as a winter residence.

The rooms are commodious and conveniently arranged, the closets are unusually large. Telephones, electric lights, steam heat, open fireplaces, and four elevators complete the detail of modern hotel equipment. Some idea of the exceptional facilities for entertaining is afforded by the fact that the hotel contains two ball rooms, with their full complement of reception and smoking rooms.

Ten minutes' ride from either the Back Bay or Trinity Station; all Boylston street and Massachusetts avenue cars pass within a short distance of the hotel.

Automobile parties will find the Hotel Somerset a most convenient place to stop, it being on the direct route to and from New York, also White Mountains, Bar Harbor, North and South Shores. Only a short distance from the automobile centre of Boston.

THE THIRTY-SEVENTH ANNUAL CONVENTION OF THE AMERICAN ASSOCIATION OF NURSERYMEN

Headquarters the Hotel Somerset, Boston, Mass.

June 12, 13, 14, 1912

"It is the month of June:
The month of leaves and roses."

We have experienced more than ordinary pleasure in preparing this annual circular for distribution among the members of the American Association of Nurserymen. The explanation lies, first, in the fact that the 1910 meeting at Denver, and the 1911 meeting at St. Louis, were very satisfactory in point of attendance and interest; and second, we are pleased with the prospects for the Boston meeting. We have met the active men "on the ground," and are enthused.

THE CONVENTION CITY FOR 1912

And this year we turn our eyes and steps towards New England. Boston has invited us to celebrate our thirty-seventh anniversary within her historic borders. The Bostonese are proud of their city: they have a right to be: there is but one Boston. In his "Autocrat of the Breakfast Table" Oliver Wendell Holmes facetiously declared, "Boston State House is the hub of the solar system. You couldn't pry that out of a Boston man if you had the tire of all creation straightened out for a crowbar."

It would be impossible in this circular to catalog the many attractions of which Boston is the possessor. From the time that the city was founded in 1630 by Puritan colonists it has made history that interests the entire nation. The very mention of Boston awakens thoughts of heroes of Revolutionary fame, of Faneuil Hall, of the old State House, and the "old South Meeting House," all of them still preserved as historic landmarks.

True, Boston is a long distance from the homes of many of our members; but what a splendid opportunity for taking a summer vacation; and in a city that has so much to interest nurserymen directly! Boston's park system has cost more than ten millions of dollars in its development; nothing in the park line can excel it.

CONVENTION HEADQUARTERS

The convention committees acted in concert in the choice of a hotel. They thought it should be in an ideal location; fireproof in construction, first-class in its appointments, and with ample accommodation for meetings, exhibits, conferences, etc. They were unanimous in their selection of Hotel Somerset.

The Back Bay of Boston is most attractive as a residential district. Commonwealth avenue, in this exclusive section, is the most aristocratic thoroughfare in New England; over two hundred feet in width, with fine, stately shade trees and elegant residences on either side. At the head of this avenue, at the entrance to the Park, and overlooking the

picturesque Fenway and Charles Rivers, is the "Hotel Somerset." Its rooms and rates are adapted to meet the requirements of all, while its beautiful surroundings and freedom from the turmoil of the business center of the city, to which it is yet so easily accessible, make the hostelry all that could be desired. Within ten minutes' ride from either the Back Bay or Trinity Station. All Boylston Street and Massachusetts Avenue cars pass within a very short distance of the hotel.

The hotel is maintained upon the European plan exclusively.

RATES: Rooms without bath occupied by one person, \$2.50 per day; occupied by two people, \$3.00 per day. Four-room suites, with one bath, occupied by three to eight people, \$12.00 per day. Two rooms with one bath, occupied by three people, \$8.00 per day. Two connecting rooms, with bath between them, occupied by four people, \$8.00 per day. Separate rooms with bath, occupied by two people, \$5.00 per day.

It will be observed that there are opportunities for families or for friends to make exceptional arrangements at nominal cost.

From what we saw of the manager of the hotel we believe him to be sincere when he wrote: "I can assure you of the hearty co-operation of the management to try and make your Convention at the Somerset one long to be remembered by all."

HOTEL RESERVATIONS

There are several urgent reasons why members should make reservations early, the principal one being that hotels in Boston are much more busy in June than any other of the summer months. The earlier reservations are made the better selection you have. Address, Hotel Somerset, Commonwealth Ave., Boston, Mass.

MEMBERSHIP

Are you a member of the American Association? If not, why not?

Do you realize how much benefit you, as a nurseryman, enjoy because of the activity displayed by this Association in its efforts to foster and protect the nursery industry?

When we reflect that there are more than 2,000 commercial nurseries in the United States, it is surprising, in view of all they owe to the American Association, that not over one-fifth of the owners of them are identified with the organization.

To join the American Association of Nurserymen costs five dollars. Send this amount to the Secretary the day you receive this notice. You will find a blank herewith. We ask

your co-operation. You have everything to gain and nothing to lose by joining—while the Association as a whole will be materially strengthened thereby.

THE BADGE BOOK

In answer to the query—"What is it?" we reply, "An unique list of the live nurserymen of the country." Not that all the live members of the trade are enrolled. **Your** name should be therein, if not there already. Every member is given a number immediately his fee is received by the Secretary, and the membership fee entitles you to publication of name and address only. If a member be alive to his privilege he will buy a space in the book for his advertisement, thereby attracting to himself the attention of every other member, for his badge contains his registration number, which he will attach to his coat and thus introduce himself to all who meet him at the Convention. You cannot afford to be off the list of advertisers. Primarily, for your own good, and next because this is a grand co-operative concern and deserves the support of all to enable it to successfully prosecute its work.

Rates for advertising will be found on blank herewith. *If you order advertising with membership, send copy with order, as you cannot be assigned a number until space taken is known.* If you order advertising and say copy will follow you get a later number than otherwise. Make name and copy clear. This will help to avoid mistakes.

THE EXHIBITS

For information under this head application should be made without delay to Mr. A. E. Robinson, Lexington, Mass., Chairman of Committee on Exhibits. **WRITE HIM NOW.**

RAILROAD ARRANGEMENTS

There will be no railroad certificate plan; the guarantee required regarding numbers makes it prohibitive so far as this Association is concerned.

The Passenger Associations, however, assure us that Summer Tourist tickets will be on sale after June 1st on a basis, approximately, of one and one-half first-class fares for the round trip. These tickets will be good to return within thirty days from date of issue, with a final return limit of not later than September 30th.

Get in immediate touch with your local ticket agent and confirm this information. Don't delay a single day.

LET SOMEBODY MATCH THIS

The *Northwest Horticulturist*, published at Tacoma, Wash., is authority for the statement that Mr. P. A. Dix, president of the Pacific Coast Nurserymen's Association, expects to have at least one Pullman car load of Coast nurserymen for the Boston Convention.

ENTERTAINMENT

Mr. J. Woodward Manning, chairman of this committee, has so many events at his command that he wishes the Convention was going to last a whole week with only half-day sessions.

We cannot do more than hint at some of the items on his menu.

Arnold Arboretum, of which the well-known arboriculturist, Mr. Charles S. Sargent, is director. This is the largest and most comprehensive collection in the world of trees and shrubs of the north temperate zone. Nurserymen know, either from personal visitation or from books, of the Bronx Botanic Gardens, New York; also of the Royal Botanic Gardens at Kew, London, England. Valuable and interesting as are these institutions, the arboreta connected with them are merely appendages, but the Arnold Arboretum has a specialized purpose in dealing with the hardy trees and shrubs that make up its collection.

Well, you are invited to spend a half-day there under special escort.

Every nurseryman should see it.

On Wednesday evening a very attractive stereopticon exhibition and lecture in Horticultural Hall.

A cruise of the north and south shores of Boston Harbor, and a genuine New England Shore Dinner. (Yum, think of the *real* clams).

Automobile drives through Boston's parks, and to other points of interest, concluding with visits to several nurseries by special invitation, to include entertainment by the hosts, etc., etc.

For copies of this circular or any information, address John Hall, Secretary, 204 Granite Building, Rochester, N. Y.

Other hotels within five to fifteen minutes' walk of Hotel Somerset: Hotel Brewster, Boylston St.; Hotel Brunswick, Boylston St.; Hotel Thorndike, Boylston St.; Copley Square Hotel, Huntington Ave.; Hotel Nottingham, Huntington Ave.; Hotel Oxford, Huntington Ave.; Hotel Empire, Commonwealth Ave.; Hotel Lenox, Exeter St.; Hotel Puritan, Commonwealth Ave.; Hotel Vendome, Commonwealth Ave.; Hotel Westminster, Copley Square.

AMERICAN ASSOCIATION OF NURSERYMEN BOSTON CONVENTION

JUNE 12 TO 14, 1912

Enthusiasm regarding the next annual gathering of the leading nurserymen in the United States appears to be general; and we have good reason to believe there will be a large turnout. Doubtless, the secretary finds it difficult to secure immediate answers to his circular letters, owing to the fact, that this is the nurseryman's "busy day" period. But members must remember that this official is expected to get the badge book out on time for advance distribution, and we urge upon all who have not yet registered to do so at once, and send in their copy.

The New England nurserymen are planning great things for the visitors and indications are that there will be a good representation of western and southern members. The secretary reports some new acquisitions to the membership list and that the committees are all doing good work.

Any who desire information concerning the Convention should write John Hall, Secretary, 204 Granite Bldg., Rochester, N. Y.

The National Nurseryman

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Vice-President and Editor, JOHN CRAIG
Secretary-Treasurer and Business Manager, C. L. YATES

The only trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One year, in advance,	\$1.00
Six months, . . . . .	.75
Foreign Subscriptions, in advance,	1.50
Six months,	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester, N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Ithaca, N. Y.

Entered in the Post Office at Rochester, N. Y., as second-class matter.

ROCHESTER, N. Y., MAY, 1912.

AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—J. H. Dayton, Painesville, Ohio; vice-president, W. H. Wyman, North Abington, Mass.; secretary, John Hall, Rochester, N. Y.; treasurer, C. L. Yates, Rochester, N. Y.

EXECUTIVE COMMITTEE—E. M. Sherman, Charles City, Ia.; H. B. Chase, Huntsville, Ala.; J. M. Pitkin, Newark, N. Y.; J. H. Dayton, *Ex-Officio*, Painesville, Ohio; John Hall, *Ex-Officio*, Sec'y, Rochester, N. Y.

CHAIRMAN OF COMMITTEES.

TRANSPORTATION—D. S. Lake, Shenandoah, Ia.; Chas. M. Sizemore, Louisiana, Mo. TARIFF—Irving Rouse, Rochester, N. Y.

LEGISLATION EAST OF MISSISSIPPI RIVER—Wm. Pitkin, Rochester, N. Y.

LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.

CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.

PROGRAM—C. J. Maloy, Rochester, N. Y.

EXHIBITS—A. E. Robinson, Bedford, Mass.

ARRANGEMENTS—John Hall, Rochester, N. Y.; W. H. Wyman, North Abington, Mass.; H. P. Kelsey, Salem, Mass.

ENTERTAINMENT—J. Woodward Manning, North Wilmington, Mass.

PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.

ROOT-GALL—E. A. Smith, Lake City, Minn.

STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dreshertown, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President, W. W. McCartney, New Haven, Conn.; Secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

National Nurserymen's Association of Ohio—President, J. W. McNary, Dayton O.; secretary, W. B. Cole, Painesville, O.

Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary, Earl Peters, Mt. Holy Springs, Pa.

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, E. W. Chatten, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.

Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

THE BUSY SEASON

The nurserymen of the north-east are now closing up the rush of the spring work. Those farther south passed the crucial stage sometime ago. Each year is demonstrated that the rush season can be alleviated very much by equipment and management. The old days of heavy field work crowded into a short space have mostly passed out with the retailer and mail order houses. The spacious and well equipped storage house has introduced a new regime. This means that instead of a short period of feverish strain the work is spread over a period two or three times as long with accompanying greater efficiency and satisfaction. Labor saving apparatus, system and storage houses are doing much to obliterate the so-called bug-bear, the busy season.

THE RECORD MAKING WINTER

The winter of 1911-12 will long be remembered by plant growers and farmers. It is safe to say that more injury to orchard trees, root stem, twig and bud will be recorded all through the northeast than has occurred these many years.

The warm weather of the fore part was delusive. The three winter months much more than made up for any lack of low temperature during December.

The net result will be widespread injury to fruit trees in orchard. We may expect a full quota of stem splitting, bark bursting, root killing and top killing in addition to the loss of fruit buds. This is the fruit growers burden. It will mean a larger demand for fruit trees for the best thing to do in the case of severe winter injury to stem is to replant. If the root is injured the case is worse. Injured tops may be cut back.

THE ANNUAL MEETING

Anything we might say about the desirability of attending the annual talk and business fest of the nurserymen will sound like useless repetition for we have harped on this string for many years.

We need hardly address ourselves to the eastern men. As hosts they of course will be on deck if the mere fact of proximity does not bring them.

The men of the south and the west will or should come because they should see something to contrast with mere newness, bigness and recent achievement. All these Boston can provide. We are free to confess to a weakness for Boston. We like the people, the atmosphere, the general flavor of the place. It has history, culture and all the comforts of a well organized northern city. Try it, brothers from the south and the west.

CALIFORNIA ASSOCIATION PROCEEDINGS

The California Association of Nurserymen should be congratulated upon the excellent report it has recently issued. This is an account of the proceedings of their first annual meeting, which took place in November, 1911; and this youthful organization might be said to be setting the pace for older associations in this matter of gaining prestige through its publications. When we stop to think that some horticultural organizations do

not publish the complete proceedings of their annual meetings until they have been in existence for a number of years, we are all the more struck by the energy with which this group of western nurserymen is getting to work.

THE BADGE BOOK

Requests for space in the Badge Book are being received daily by Secretary Hall, as are also membership fees. Any nurserymen who have been putting off forwarding copy for advertisements in the Badge Book should delay no longer, for material for this publication is going to the printer in just a few days. The interest shown thus early seems to indicate a larger turnout than usual at the annual meeting. Members of the Association residing in the western states can obtain tourist rates to the East, and the sooner they consult their ticket agents regarding this matter the better. Secretary Hall says, "Every present member ought to get in touch with his fellow nurserymen in the neighborhood or county or state, and secure him for membership."

Trade Notes

SEARS, HENRY & COMPANY

Sears, Henry & Company, whose business is conducted in Geneva, do not keep their offices open all the time during the winter. Mr. Henry states, however, that the red varieties of apples have been very much in demand and that the spring sales thus far have been very good. Baldwins and McIntosh Reds are at present the most popular varieties of apples.

JAM FACTORY FOR GENEVA

The capitalization of a jam factory, which promises to be ready for business in 1913, will undoubtedly give a decided stimulus to the raising of peaches, currants, cherries, and other fruits in the neighborhood of Geneva, and demand for this fruit will be felt by the nurserymen in this region. The fact that the glass jars are manufactured nearby gives a further significance to the extent of the project.

WELL KNOWN GEORGIA FIRM BUSY EXTENDING THEIR HOLDINGS

A recent issue of *The Farmer's Chronicle*, Augusta, gives a mighty interesting account of some of the work done by the three Berckmans brothers, members of the firm of P. J. Berckmans Company of Augusta, in developing new sections of the state. There are many places in Georgia where land can be bought cheap, but can be transformed with a few years of intelligent care into most valuable nursery or orchard land, and large areas of such property have been secured by this firm. In adding ten thousand trees to their orchard of thirty thousand peach trees near Mayfield, the Berckmans brothers have used dynamite in clearing the land, and a large part of the article mentioned is descriptive of the results obtained. A tabulation of the work of removing sixty oak and pine stumps,

anywhere from seven to forty-eight inches in diameter, shows the average cost of destroying a stump to have been twenty-one cents.

WORK OF GRIFFING BROTHERS DESCRIBED IN THE MIAMI PRESS

It was twenty-seven years ago, says the *Miami Herald*, that the members of the firm of The Griffing Brothers Company, five in number and then only boys, settled at Macclenny, Florida. In 1886 their first annual nursery catalogue was issued, and the demand for their nursery stock soon necessitated the purchase of more land. In 1903 the capital stock of the corporation which had been formed during the nineties was increased to \$150,000. The Company has a Miami branch, and operates nurseries and groves in other parts of Dade County, while their main offices are located at Jacksonville. Their work with grapefruit is increasing rapidly, and their plantings of these and other citrus trees are being constantly added to in places especially suited to their growth. Branch nurseries are located at Coconut Grove and McAllen, Florida, Port Arthur, Texas, and Grand Bay, Alabama. Their latest increase in capital stock brought it to the \$500,000 mark.

NEW ROSE, MISS GENEVIEVE CLARK

Messrs. Jackson & Perkins of Newark, New York, are about to put on the market a new rose under the name of Miss Genevieve Clark. The entire stock of this rose was bought some years ago by Mr. Perkins from the originator, Peter Lambert, of Trier, Germany. The petals are of a light pink, with an even more delicate pink underneath. After testing this rose in their nurseries for several years, the Jackson & Perkins Company consider it a production of real merit.

A new nursery firm at Mitchell, S. Dak., has been incorporated under the name of "The Newburys," with a capital stock of \$100,000. The incorporators are Charles E., Edwin C., Elizabeth A. and Jesse A. Newbury, and Frank J. Herrick, all of Mitchell, where the Newbury family has built up a large greenhouse business.

We are in receipt of a large 1912 poster calendar from F. E. Meyers & Bro., Ashland, O. The body of the calendar shows their different lines of pumps, Hay Tools and Barn Door Hangers and serve as a ready reference.

AMERICAN PEONY SOCIETY

Annual Meeting and Exhibition at Ithaca During Peony Season, 1912

The Directors of the American Peony Society have decided to hold the annual meeting and exhibition for 1912 at New York State College of Agriculture, Ithaca, New York. The exact date will be announced later, the aim being to hit the height of the season at Ithaca, so that the bloom in the trial plots will be at its best. President Farr and Secretary Saunders are laying plans for an interesting program. The feature of the meeting, however, will be an exhibition of the blooms of all varieties from the trial plots at Cornell passed upon by the committee on nomenclature as true to name and authentic. This will prove an exceptional opportunity to clear up mistakes and eliminate synonyms.

ROCHESTER NURSERIES IN MIDWINTER AS DISCOVERED BY AN AMATEUR

**Large Stock in Storage. Evolution of Storage Methods.
Fashion in Varieties.**

ALFRED C. HOTTES

[SPECIAL CORRESPONDENCE OF THE NATIONAL NURSERYMAN.]

The fact that the western nurseries, when they were acquiring a trade, could not get their stock, particularly pears and plums, early enough when these were shipped in the spring, as was then the custom, led these firms to work out some way of storing their stock. At first they merely dug stock in the fall and heeled it in near the nursery packing house, out-of-doors, but because the trees thus treated made a compact mass, the soil retained its frost longer and the purpose of the heeling in was defeated. They then built cellars, often underground, heeling-in the trees in sand, and imitating natural conditions by standing them up.

In 1879, Mr. Irving Rouse attempted the keeping of forty thousand Mahaleb cherry trees in cold storage. It must be noted that cold storage at this time was little used for any purpose. The cherries were left from the spring planting, and were allowed to remain in the boxes in cold storage till the following spring, when he planted about ten thousand; they grew nicely.

STORAGE FACILITIES OF THE VARIOUS NURSERIES

Glen Brothers, Frederic E. Grover & Co., Hooker, Wyman and Company, and The Hawkes Nursery Company store their stock merely by heeling it in in sand or soil in storage sheds. In some cases what they do not have room for they dig in the spring or ship in the fall.

John Charlton and Sons store bush fruits, ornamentals, and roses principally. Their house is the gable type, having three roofs, giving two air spaces. The sides of the roof are even with the soil, and the walls are of solid stone, two feet thick, and sunken in the soil. Their house is quite well insulated, and they use heat only in most severe weather.

ELLWANGER & BARRY'S METHOD

Ellwanger and Barry store as much of their stock as possible by heeling-in in sand, placing the trees and shrubs close together in large blocks, with wide rows between for gathering the stock. Specimens of all stock in the nursery are stored in proportion to the demand for the particular variety. Comparatively few ornamentals are stored, about 100,000 shrubs, 100,000 roses, and 75,000 fruit trees. All peaches and roses are dug in the fall and stored, while only a percentage of the bush and tree fruits are removed from the soil. The trees are graded when brought from the field, and stored under their proper headings as to variety and grade. Their storage house is of frame construction with air spaces, the roof being of wood covered with tar paper.

There are really four houses; a rose, and a shrub house, a house for general stock, and one for the small fruits. These are connected in such a way as to be handy to the packing room, into which wagons can be driven and loaded.

CEMENT STORAGE HOUSE AT WOODLAWN NURSERIES

Mr. Allen L. Wood of the Woodlawn Nurseries has a fine storage house 336 feet long by 130 feet broad, constructed of cement blocks (24" x 3" x 8"), arranged so that there are three walls, making two 1½" air spaces. The three walls are tied together by V-shaped wires attached to every block. In the manufacture of the corner block, three wires are used for reinforcement. The roof is covered with roofing paper. All wood used in construction of the building was soaked in kerosene, and all posts used had holes bored in them 18" deep, filled with kerosene and plugged. Each year the posts are tapped and holes filled again. Mr. Wood thinks this a thoroly practical method of keeping his timbers from decay. The rafters of the cellar are covered with matched boards, thus enclosing the area between roof and ceiling. That the lack of air may not cause a decay of rafters, there is an outside board door allowing a free passage of air thru between them, drying them out and preventing decay. Mr. Wood maintains no heat in his house, believing that he approaches outdoor conditions, since he covers the roots of all stock with excelsior, moss, or sand. He maintains that the absence of heat does not cause them to dry out, and that his peaches weigh three to eight pounds more per bunch, if they have not dried out. In labeling his stacks, he uses a label which can be hooked upon a projecting arm, and he may thus readily change his labels as the contents of the bin are changed. A railroad baggage truck is used to carry trees from the main stock room to the packing room. This is very economical, in that it carries at one load about 1000 XXX trees or 1800 XX trees. The trees are now labeled and placed in smaller stacks, of which there are 494, where small orders are put up. In the main stacks the trees are in bundles of ten, tied together with tarred string. At the beginning of each series of apples, pears, and so forth, large labels are placed. At one side of the packing house is a large bin holding two carloads of arctic moss used in packing. The level of the floor of the packing room is such that the driveway leading into it is at a height convenient for loading the boxed stock without lifting.

SHIPPING BUSINESS OF CHARLTON NURSERY COMPANY

The Charlton Nursery Company, of which Mr. J. M.

Charlton is president and Mr. E. S. Osborne is secretary-treasurer and general manager, maintains a large, up-to-date storage house, storing this winter about 350,000 trees, of which 50,000 are apples. Their business is mainly a shipping one, their shipments including most of the territory to the Mississippi River. Mr. Osborne reports that this year his sales are thirty per cent better than last year, giving prospects of a big year.

CHASE BROTHERS' STORAGE SYSTEM

Chase Brothers' Company, with their storage facilities located in Brighton, have a concrete storage house three hundred feet square, constructed of walls six inches thick with one air space of four inches. The walls are tied together with wires placed at convenient places. Roof is of yellow pine unmatched, covered with building paper, then 2 x 2 strips of matched boarding, covered with three ply felt. Within the house the humidity is kept about 79-81%.

The peaches are stored where there is no heat; for they mildew easily. The roots of all the trees except cherries are covered with excelsior. The stock is packed in the bins, so that the overlying rows are alternately set in. These only are covered with excelsior, since they can not be sprayed. Evergreens, Walnuts, Calycanthus, Cornus, and Viburnum must be-heeled-in; for they mildew easily. Other ornaments have no moss on them, and they are merely sprayed about every three weeks. Weeping trees need be heeled-in; for their branches break easily when packed together.

The roses and small fruits, with exception of the ramblers, which start growth easily, are stored with roots covered with moss. The perennials are stored in sand or heeled-in. Peonies are stored in moss. Little attention is paid to temperature with perennials and peonies, but they need fresh air, without which they mould easily.

BROWN BROTHERS' COMPANY, WHOLESALERS

Brown Brothers, with eighteen hundred acres under cultivation, do a large wholesale business. They have a large 400 x 100 foot house for apples and other tree fruits, a rose room, a small fruit room, and a section for the storage of perennials in sand. The two-year-old roses were very fine early in February, and were in bundles of twenty-five, stored in damp sand. Their cellars were heated merely enough to keep the temperature about 30°, and were constructed nearly frost proof.

DEMAND FOR THE VARIETIES

A few words in regard to the sales of the different fruits. The various nurserymen agree that the leading apples sold by them this year so far are: Baldwin, given first place; Ben Davis is reported as selling better than ever this year; McIntosh and Northern Spy vie with the Ben Davis in sales. The summer apples, though not reported as gaining in popularity, are confined principally to Wealthy, the most popular, and Duchess, which is also popular. Stark and Northwestern Greening are both reported to be gaining in favor, the Northwestern Greening being especially valuable for topworking. In Pennsylvania the York Imperial is most important.

The Bartlett Pear still holds its own. Anjou and Clapp's Favorite seem to be second in sales. Kieffer, the "money-maker," and Seckel hold their places, the Kieffer constituting about one-fifth of the pear sales. Of the dwarf pears, Duchess d'Angouleme leads, with Anjou and Seckel as great favorites also.

The sour cherry still holds its place as the greatest seller, being the one demanded for canning. Montmorency, Early Richmond, and Dyehouse are the leaders, in the order named. Of the sweet varieties, Napoleon, Black Tartarian, and Windsor, with possibly Governor Wood, are still the greatest favorites.

Of the plums, there is a greater difference of opinion as to the leading varieties. At least, the Japanese varieties, Burbank and Abundance, are as popular as ever. Nevertheless, a list of popular selling plums would be incomplete were German Prune, Red June, Shropshire Damson, Bradshaw, and Lombard omitted.

The Elberta peach leads, followed by the early varieties, which are gaining popularity, Early Crawford, Carman, and Late Crawford being especially prominent. The demand for XX stock is greater in peaches than for XXX, the growers holding that size of stock is not indicative of quality in the peach.

Apricots constitute only a small proportion of the nurserymen's sales. They are planted merely by private estates, and their sales would hardly equal one per cent. of those of peach. Alberge de Montgamet and Moorpark are about the only ones planted.

The Orange quince sells better than all other varieties put together.

SMALL FRUITS

Among the raspberries, Cuthbert leads the reds, Columbian the purples, Plum Farmer, Ohio, Gregg or Black Diamond being the best black raspberries. Marlboro is important as an early red raspberry.

The leading blackberries are the Snyder, Eldorado, and Blowers. Glen Brothers are advertising a variety which they claim is especially prolific and a strong grower, and they have named it St. Regis.

Currant varieties differ greatly in demand, but Cherry, Fay's Prolific, and Wilder are especially good. C. M. Hooker and Sons are advertising and sending out wholesale the "Perfection Currant," which was originated and introduced by Mr. C. G. Hooker.

No other bush fruit is increasing in sales like the gooseberry, Pearl and Downing leading. There is a steady fall in demand for the English varieties.

A majority of the Rochester nurserymen place the grapes in the following order of importance: Concord, Niagara, Worden, Brighton, and Salem.

Strawberries vary in demand a great deal, but Senator Dunlap, William Belt, and World's Wonder are important varieties given by Mr. Allen L. Wood.

ORNAMENTALS

In ornamental trees, roses and shrubs, it is difficult to name favorite or leading varieties, it being often a question merely of what suits the situation best.

Among the roses, the hybrid perpetuals as a class lead in sales, Frau Karl Druschki, Mrs. John Laing, Paul Neyron, Ulrich Brunner, General Jacqueminot, and Kaiserin Augusta Victoria being the most important. Of the climbers, the hardy varieties like Crimson Rambler and Dorothy Perkins are good sellers.

California Privet is gaining each year in use for hedges. *Berberis Thunbergii* still holds its place.

A vast assortment of shrubs are being sold this year. *Spirea Van Houttei* deservedly holds first place, with *Hydrangea paniculata grandiflora*, second, followed by *Spirea Anthony Waterer*, *Syringa*, *Forsythia*, and the *Viburnums*.

Probably maples, including the Norway and the Silver leaf, take the lead in ornamental trees. The Carolina poplar is ranked next in sales, but not in value. Ellwanger & Barry report good sales also in lindens, Oriental planes, oaks and American elms.

Glen Brothers are making a specialty of nuts. They have complete control of an especially large, sweet chestnut known as Sober Paragon.

THE R. G. CHASE COMPANY, GENEVA, N. Y.

(Omitted from Geneva sketch last month)

AN UP-TO-DATE ESTABLISHMENT

Mr. R. G. Chase, the senior member of the R. G. Chase Company, called for the representative of THE NATIONAL NURSERYMAN in an automobile, and over snow covered roads the extensive plantations of the Chase farms three miles out were reached. These contain varied assortments of fruits and ornamentals, including 700,000 apple trees of thirty to forty varieties, about one year out in the fields. Mr. Chase finds that McIntoshes are most in demand of the apples at present and "wishes he had 50,000 of them." So do the other growers! He believes that the Geneva grown trees weigh more than the western trees do, due to her favorable climate. Of a seven acre eight year Montmorency cherry orchard Mr. Chase is particularly proud, and considers it to be one of his best paying investments. On some other cherry orchards observed the Mahaleb stock was being used, although the Mazzard was preferable; for it seems that some disease has attacked the Mazzard cherry stocks in Geneva. At least, that has been Mr. Chase's experience in the last three years. He has profited by his experience and is now using Mahalebs only.

The peach seedlings in the fields observed were grown, as seems to be the custom generally, from the natural peach pits, growing wild in North Carolina and bought in great quantities by northern nurserymen.

STORAGE AND PACKING HOUSES AND OFFICES

The executive offices and storage and packing houses were next visited. These occupy a three acre plot of ground behind Hobart College and are well arranged and well placed frame houses. Twenty-seven men make up the crew in the storage houses during the winter, while sixteen are at work in the office. In the busy seasons 150 to 200 men are engaged. The Chase Company have a large retail and wholesale business besides.

The packing and storage houses comprise one acre of roofing, including a modern up-to-date concrete fumigator which allows the fumigation of a wagon load of stock, as it comes in from the field. In the packing house three men are busily engaged all winter renovating and repairing the machinery to be used in the spring. Besides the renovating of plows and harrows, even tree diggers are repaired. The plant is equipped with modern conveniences; a complete telephone system which connects the packing shed with all parts of the plant is in evidence; electric lights are available conveniently for lighting and allowing the men to work in the busy storing season when it gets dark so early.

The storage houses were in extremely good order. The different trees, arranged according to kind, variety and grade, were stored on racks in a broad shed-like frost proof building, supported by concrete posts which have displaced the old rotting wood variety. Scientific management and efficiency is just as much in evidence here as in other great businesses.

AN INNOVATION IN HEATING

Most of the varieties of fruit trees as well as ornamentals have their roots covered with excelsior, which is kept moist by occasional sprinklings. And yet the earth floor was dry. Mr. Chase has originated a novel innovation which he thinks protects his trees better than using simply the oven alone. He surrounds his coal stoves with high zinc collars which prevent the heat from radiating near the bottom and throws it up where it does not injure the roots. Little heat has been required thus far, the temperature remaining around 32°, supplemented with air spaces and double doors.

FRUIT TREES IN STORAGE

Of the number of fruit trees, the following figures were available. Of peach trees there were the most, 121,000; of apples 70,000; of pears, 13,000; dwarfs, 8,000; of cherries, 23,000; of plums, 19,000. Of grapes there was a good quantity, of which the Concord has proven the best seller.

A certain number of plants were not stored in racks and covered with excelsior, but were stored in sand. Among these were the junipers, cedars, and evergreen varieties. Although this method gives more trouble, it is most desirable.

STORAGE OF SMALL FRUITS

A new method of keeping berries and small fruits over the winter is being tried. It was not attempted to keep them from the frost. Mr. Chase likes to have them freeze and protects only the roots with sand which is pushed between layers of plants, facing each other. On the other hand, difficulty is found in keeping asparagus over the winter. This was packed in sand and nailed in a wooden box.

Poplars seem to be a great favorite with the Chases, and they find the demand for their fast growing decorative ornamentals a steady one. A large quantity is being wintered, of which there are a great number, sprinkled with sulphur to prevent mildew forming.

SEEDLINGS

A separate house, with a cellar, is devoted to the trim-

ming of seedlings, and here eight men and a foreman are busily engaged all winter. The foreman in the nursery business is a man of great importance, and in the places visited has invariably seemed to be a man of energy and a thorough student of the practical side of the business. The seedlings imported from France, are shipped during the winter by the Franco-American Seedling Company, a co-operative organization of wholesale nurserymen in the Geneva district, who combine for the purpose of buying seedlings grown for them in France. The business on the Continent is in the hands of a Frenchman who does all the contracting for seed growing with the French peasants and attends to the shipping, in bond to Syracuse and thence to Geneva, where the stock is officially inspected.

After the seedlings are trimmed, they are graded, packed in bundles of 50 each, and are brought to the adjoining cellar, where they remain till they are brought out for the spring planting. The neatness and order in which these stacks are kept is admirable. Besides seedlings, a number of cuttings and French ornamentals, lately received, were stored here. Among these are a new French willow for tying purposes. It is interesting to note that it is often hard in the early spring, when occasional warm weather may set in, to keep this cellar cool enough to prevent the seedlings from sprouting. Tons of ice often have to be used to prevent the cellar from getting too warm. Such are the extremes the nurseryman has to contend with in this climate.

As to business, past and future, there has been very little during the past winter, as the early cold weather put a curtailment on the orders from the retail trade.

STUART & COMPANY

(Omitted from Newark sketch last month)

Stuart & Company are in the town of Newark, where their offices and their warehouse facilities are located, while their nurseries of about 430 acres of tile drained land are located about Orleans.

The storage and packing houses at Newark are built with a view of economizing time and labor as much as possible. The first is a large frost proof building with three air spaces in the walls and paper between the boards. Although there is a hot water system present on the blizzard side of the building, it is little used except in case of emergency, and has not been used thus far this winter. The trees in this storage room are not covered at the roots with excelsior, nor are the roots very much dampened. It is noticeable that the stock is free from mold or mildew. This storage room is flanked on both sides by packing room, in which at the present time some trees are stored.

The roots of the trees in the packing rooms are covered with excelsior, because the building here is not as frost proof as the main storage building. The other packing room is being used temporarily as a work shop for the making of boxes, but even this work had to be curtailed owing to the inclement weather preventing lumber from being shipped down from the hills. A few shipments made during the winter are protected from the cold by three thicknesses of paper. This arrangement of the main storage room in the middle with the two packing rooms at the ends saves time, labor, and trouble during the busy packing season.

Another economical device in the packing department is an overhead rail in the packing room and movable scales, which slide along the rail. These enable the packer to lift, weigh, and bring the packing case from any spot to the wagon, all in one operation.

The stock is stored in two tiers, an upper and a lower floor. On the upper floor we find a similar arrangement for saving time. A running ground where the orders are filled is in the middle, while two shoots lead down to the packing rooms at each end. There is also a tying room and a work room on the upper floor. Separate rooms for the storage of berries and roses are on the lower floor. In these the temperature can be easily regulated by the opening and closing of heavy double doors.

Outside of the main storage room a smudge oven is used to prevent too great cold, because the firm believes that this is a safer method than the stove system, which may cause sparks.

The order and the arrangement of the different plants is very methodical. A diagram of the storage house, giving the place of every variety, is nailed up conspicuously and covered by a glass plate, because the workmen, in looking for a variety, always use their fingers in spelling it out, says Mr. Pitkin. Until he hit upon this method of plate glass insurance the diagram had to be changed every day during the shipping season. Now it remains clean for a whole season. One has to be a student of the psychology of the day laborer to be a successful nurseryman nowadays.

Shade trees, roses, and the ever present McIntosh apple seemed to be in especial demand.

McINTOSH AS A FILLER

In eastern New York and New Jersey, McIntosh is a September apple. Its quality seems to vary considerably as affected by elevation and soil. The true home of the McIntosh is the Saint Lawrence River region, and it reaches its highest excellence in northern latitudes. It is being planted extensively as a filler, but there are those who think it is not suited for this purpose, on account of its vigorous growth, and the fact that it is a long lived tree. On the other hand, it is an early bearer.

THE ORCHARD

"Red and russet, and yellow,
Lying here in a heap,—
Pippins, rounded and mellow;
Greenings, for winter keep;
Seek-no-furthers, whose blushing
The soul of a saint would try,
Till his face showed the crimson, flushing
The cheek of a Northern Spy."

—*Farm Journal*.

Ben Hudnall, proprietor of the Floral View Nursery at Tyler, Texas, has removed his nursery to Pittsburg, Texas, where he has purchased a tract of land near town. He will devote his full time to the propagation of the rose, a select list of ornamental shrubs, trees and small fruits.

THE NATIONAL NURSERYMAN PUB. CO.:

Enclosed please find one dollar to renew our subscription for one year. We find THE NATIONAL NURSERYMAN very interesting and valuable.

New York.

J. J. NORTON & SON.

HOW TO FORCE RHODODENDRONS

B. B. C. Felix, of Felix & Dykhuis, Boskoop

Besides being able to produce beautiful effects with the rhododendron in landscape architecture, one finds they are ideal forcing plants, and their popularity stands preeminent with the Azalea Indica. Their heavy, dark green, leathery foliage is striking, to say nothing of the great masses of varied colored flowers, which are produced in large trusses on the end of every branch of the plant. There is such a variety of color in the long list of varieties that, with a judicious selection, it is possible to make any desired color arrangement. The colors are generally pure and show variegations from pure white to clear violet, delicate pink and deep crimson.

Although I spoke of large trusses, I am sorry to say that the rhododendron which is forced in the spring does not always show them as large and well-colored as they should be. I ascribe this to wrong treatment in forcing in the majority of cases. It takes time and care to get a rhododendron into bloom and also a knowledge of the different varieties, whether they are early, medium, or late blooming. By reason of the success we have had with our rhododendrons at various exhibitions and especially at the great flower-show at Boskoop, April, 1911, we received a number of letters asking us how we managed to have so many varieties in bloom at one time, where there were early, medium and late blooming varieties seen in the collection.

When a rhododendron is sent out it is fully prepared for forcing. The peaty soil in Boskoop is the ideal soil for this class of plants, especially for those destined to forcing. Here they flourish and thrive to perfection and make strong buds which will easily respond to applied heat.

After the cases have arrived from Holland, they should at once be unpacked. Generally they are more or less dry in the roots, and should be placed in a shallow tank or other receptacle to moisten them. There they can be left for half an hour or so. The canvas should be taken off the rootballs, and the heads untied. It is best to pot them immediately in not too large pots. Pot them if possible with leafmould, and do not ram the soil too hard in the pots. The bottom of the pots should be covered with potsherds. If the balls are too heavy, shake off the superfluous soil, but do not cut the roots. Some varieties make three to four buds on the same branch. Some of these should be taken off, so that only the strongest is left. Superfluous buds also should be broken out to allow those that remain on the plant sufficient space to develop well.

The pots can now be heeled into a cold frame. In fine weather or during a mild rain, the lights must be taken off, and only in freezing weather should they be put on. Do not place them in the hothouse right away. The object is to have the roots sprout. The better they are rooted, the better they will force. If possible, let each plant stand clear of its neighbor, so that light and air can pass freely between them. They should be safe from frost. Watering should be done only if necessary.

They should be left in the frame till early January, when they may be taken into the greenhouse. A temperature of 50-60° F. should be maintained to start with. After four or five weeks the roots begin to sprout and from that time a higher temperature, not exceeding 70-75° F., can be applied.

In the first days the rhododendrons are in the greenhouse, the leaves need be syringed with a thin spray only once a day, but after the temperature is raised, and especially on sunny days, spraying twice a day will be necessary. Do not use the hose. By the middle of March, the glass has to be shaded with canvas or similar material, and the pots should be watered abundantly. It is advisable to have always a moist atmosphere in the house.

When rhododendrons are taken into the greenhouse early in January some of the earliest blooming varieties can be had in bloom by the beginning of March. Spraying on the open trusses should be avoided. If a number of varieties are wanted in bloom at a fixed time, then the early flowering varieties must be brought inside later than the medium, and these again later than the late flowering varieties.

Late varieties should never be forced early. This costs a lot of heat, and the results are doubtful. It is very essential to know if a variety is early, medium, or late. Ignorance of this leads to disappointment.

FRUIT MARKET CONDITIONS AT VARIOUS POINTS

Towards the middle of April it was estimated that within the month previous the stock of apples in storage had been reduced fifty per cent. Choice and fancy fruit of Ben Davis sold as high as \$3.50 at this time, Baldwin and Russett \$4.00, and Greening \$3.00 to \$5.00 per barrel, says an advice from Rochester in *The New York Packer*.

NEW YORK.—In New York Baldwins and a few Greenings were coming to the market, and on one or two days fancy fruit of these varieties was selling at \$4.50 and \$5.50, respectively.

CHICAGO.—At the same period apples, except fancy stock, were slow of sale in Chicago, due largely to the arrival of quantities of southern strawberries. Baldwins were bringing \$3.75 to \$4.00, Spys \$3.50 to \$4.50, Greenings \$4.00 to \$5.00, and Ben Davis \$3.00 to \$3.50.

KANSAS CITY.—Strawberries from Louisiana and Texas brought \$3.00 to \$4.25 for a 24-quart crate, and there was not enough good stock to satisfy the call. The demand for apples was becoming slighter, while the prices for various southern fruits remained rather steady.

PITTSBURG.—The amount of fruit and produce entering the Pittsburg, Pennsylvania, region annually approximates 30,000 car loads. Merchants here are handicapped by the congested conditions of the railroad yards, which, together with the high storage charges for produce not unloaded within forty-eight hours, causes great expense and consequent high prices.

AMONG THE EXPERIMENT STATION WORKERS

Brief Notes on Recent Bulletins of Country-Wide Interest

THE USE OF EXPLOSIVES IN CLEARING LAND, J. F. Kadonsky. Bulletin 216, Wisconsin Agricultural Experiment Station.

The studies outlined in this bulletin describe co-operative work between the Wisconsin Station, the U. S. Department of Agriculture, and the University of Minnesota. The writer points out that the action of dynamite is equal in all directions, and that "the action on the soil chemically is not detrimental, as is commonly believed, but would rather tend to improve fertility." Illustrations show the method of placing the explosive in removing stumps. Generally speaking, its position should be in the soil just under the stump at the center. Dynamite and virite were the explosives most frequently used in the Minnesota and Wisconsin experiments, the former in strengths of from 20 to 60%, the latter in but one strength, equal to 40% dynamite.

PEDIGREED NURSERY STOCK, U. P. Hedrick. Circular 18, New York Agricultural Experiment Station.

Professor Hedrick states, "I believe a fruit grower can spend his time to better advantage than in attempting to breed fruit trees by bud selection." Mutations in plants, such as the appearance of "a branch of russeted, sweet or red apples in a Rhode Island Greening tree," may be transmitted to offspring. Variations such as greater vigor or more perfect fruit, produced by rich soil, abundant sunlight, and so forth, are probably not transmitted. The present theory is not that selection is a continuous process, but that at some particular time with a certain species a new character is added, which is transmissible to the succeeding generation. Professor Hedrick gives seven practical difficulties in the way of growing trees from selected buds, then concludes by saying that "The present practices of propagating fruit plants are justified by the precedents of centuries. . . . Let us have real, precise, abundant evidence before demanding a reform that will revolutionize nursery practices."

ORCHARD MANAGEMENT, C. I. Lewis. Bulletin 111, Oregon Agricultural Experiment Station.

This publication of ninety-six pages gives concise recommendations for the care of an orchard from the time of choosing the site through the operations of tillage, fertilizing, mulching, irrigating, pruning, and so forth. There are numerous illustrations showing the results of different methods of treatment. Several planting plans are given, and tables show the amount of plant food necessary for growing fruit trees, and the plant food of manurial value removed from the land by fruit crops. The bulletin should be of special interest to the Oregonian, as varieties for different sections of the state are listed, and special directions are given concerning several of the fruits and nuts grown in Oregon.

SEEDS AND PLANTS IMPORTED, B. T. Galloway. Bulletin 233, Bureau of Plant Industry.

Out of a list of over 1100 introductions, nearly a thousand which are likely to interest plant experimenters in the United States are briefly described. These include trees from deserts, probably adaptable to some of our western states; new species of persimmons; various plants from northern regions or high altitudes which, it is hoped, will prove hardy here; and so on through a great variety of shade trees, ornamentals, and fruit-bearing plants.

ORCHARD HEATING, C. G. Woodbury and J. W. Wellington. Bulletin 154, Purdue University Agricultural Experiment Station.

The Indiana Experiment Station gained a knowledge of the behavior of orchard heating devices by tests in a level orchard of fifty acres planted mostly to apples eighteen to twenty-two years old. The statistics published herein show a rise in temperature of from 2.2°F. to 10.2°F., the number of heaters used varying from twenty-five to one hundred thirty-eight. The writers emphasize the fact that orchard heating will not pay if there are other more important factors than frost injury standing in the way of securing a profitable crop.

THE PEAR AND HOW TO GROW IT, G. B. Brackett. Farmers' Bulletin 482.

The difficulty of maintaining pear trees in a healthy, productive condition has discouraged their planting, and this comprehensive treatise based on practical experience is welcome to friends of this luscious fruit. Propagation by budding is described, and illustrations serve to make more clear the directions. Soil, drainage, and fertilizers receive attention, and lists of varieties whose periods of ripening range over the whole season are included. Several pages are devoted to pruning and training. The bulletin closes with illustrations and descriptions of some twenty select varieties of pears.

PEAR THRIPS AND PEACH TREE BORER, Earl L. Morris. Bulletin 228, California Agricultural Experiment Station.

Experiments during two successive years indicated the value of lime for use against pear thrips. This was applied in the form of a thin whitewash just as the buds were beginning to open, and both years the number of blossoms which finally developed were in proportion to the amount of whitewash used. The second year the "sprayed trees averaged eight times as much fruit as the unsprayed trees." The cost of material used ranged from one to one and one-half cents per gallon.

The results of asphaltum treatment for the peach tree borer have been tested for four years in a single orchard. No injury from the use of grades "C" and "D" has been apparent, and "it was found that a thick, heavy coating prevented both the issuance and the entrance of about ninety-five to ninety-eight per cent of the insects."

APPLE ORCHARDING IN ONTARIO, Bulletin 194, Ontario Department of Agriculture.

The past few years have seen a renewal of interest in the planting of orchards in Ontario, and greater attention to the proper care of established trees. It is a recognized fact that apple orchards can and frequently do constitute one of the most profitable of the farm industries. Factors to be considered in selecting varieties are adaptability to the section and acceptability to the markets, together with the number of varieties to plant and the ratio of each. A list of the most valuable varieties for market, as a result of tests, is given in the bulletin under consideration, and another list includes apples hardy north of latitude 46°. A valuable feature of the bulletin consists in the large number of cuts of farm implements and tools, some of them shown when in use. Twelve pages are devoted to spraying questions. Another interesting section is that on packages and packing, since it is apparent in this day that it is the progressive packer who attains the greatest success in marketing his fruit.

IMPORTATIONS RECEIVED BY McHUTCHISON & CO.

"Last week (March 21st to 28th) received from Holland, England and France on seven steamships 1252 cases and bales of nursery stock. From these consignments 36 solid carloads were made up, 30 of which went to one firm. This does not include the less carload lots.

In Raffia we have at the present time on hand, or on the water consigned to us, a total of 696 bales of 225 pounds each. Our trade is growing rapidly in this line.

Steamship Vaderland due from Belgium April 8th will bring consignments to us 1390 Bay trees. More will follow by each weekly steamer. Our business is largely running to carloads to the wholesalers and jobbers."

Mr. J. Dykhuis of Felix & Dykhuis, Boskoop, Holland, is making his annual tour of the United States and Canada. He is now calling upon nurserymen in the country. Among the novelties which he is pushing are roses, hydrangeas, rhododendrons and conifers.

Quiz Column

APPRAISING NURSERY LANDS

Editor NATIONAL NURSERYMAN:

Will you give me a little information in regard to the values of nursery lands?

I have been asked to give evidence before a board of arbitrators, who are trying to arrive at a decision in regard to the value of some nursery lands in Ontario, through which a new railway is passing. The land through which they are passing is not what you can call ideal nursery land by any means, but the owner, like so many other people who have no special love for large corporations, is asking a most exorbitant figure per acre. I have been asked, rather hurriedly, to give this board of arbitrators some idea of the productive value of ordinary nursery lands per acre. This is a somewhat complicated question in itself to answer and it is difficult at this season of the year, when one has no opportunity of judging the quality of the soil, as it is covered with snow. The only satisfactory way to handle the matter, I think, is to find out the approximate productive values of nursery lands per acre in New York State and Ontario, and to strike an average. The productive value of an acre of nursery land would vary, of course, year after year. For instance, at the present high prices for apple trees, an acre set to these would naturally return larger profits than the same acre set to cherries; but there is this feature, that the same acre planted to apple trees could not be planted again to apple trees after the first crop has been taken off it. I realize that it is a very difficult matter to handle, and I hope I am not trespassing on your liberality too much by asking you to give me the benefit of your wide experience.

If you will give me some idea as to what it costs in your part of the country to plant and cultivate an acre of apple trees the first year, second and third year also, I will feel extremely obliged.

Can you tell me what is an average percentage of a stand of apple grafts, after the first year, and what (at the end of three years, say) would be No. 1, No. 2 and No. 3 trees? I want to find out what No. 1 trees one could expect out of a block at the end of his third year, and how many two and threes.

CHARLES K. BAILLIE.

ANSWER—We do not feel competent to answer this question. In our judgment the value of an acre of nursery land is determined by its productive ability in this or that kind of crop. We can readily imagine an acre of land which would be cheap at a rental of \$20 for growing grape cuttings or small fruits. This would mean a capital value of four or five hundred dollars. Another acre for this purpose might not be worth the amount of the rental outright.

In the growing of fruit trees, it is fair to say that land capable of producing good thrifty apple trees will also produce equally good pears or stone fruits, so that by a suitable rotation its crop producing ability can readily be maintained. It is also a matter of experience that the best stock is grown either on naturally drained virgin soil, or on deep, well drained alluvial deposits. With proper rotation of crops both fertility and high grade stock may be maintained for many years. The nurseryman, however, covets new land and virgin areas; for here there is no contamination of disease.

What a given piece of land is worth for the growth of nursery stock can not be approximated until actually tried. Again the question of location is very important.

We shall be very glad to have this question discussed by the men in the field.

EDITOR.

THE NATIONAL NURSERYMAN:

During March ulto. I received from New England and "lined out" several thousand 8 inch Oriental Plane cuttings, these should have been received earlier in this climate. I left two buds above ground and all are coming out as a starter beautifully in the budding. I fear that the rooting will be too late to support the top growth.

Would you pinch off one of the buds or leave both and take chances? Thanks for information.

Very truly, WM. L. BURTON.

Louisiana.

ANSWER—You need have no fear that the starting of the buds will retard new growth, the roots will take care of themselves. After the buds have made a growth of about three inches cut away all but the strongest shoot and you will produce a good tree.

Business Movements

BRECK-ROBINSON NURSERY COMPANY

This corporation has been recently formed, uniting business men who have long been favorably known to buyers of seeds and nursery trees. The firm of Joseph Breck & Sons, 51 and 52 North Market Street, Boston, Massachusetts, dealers in seeds and agricultural implements, has been in existence for nearly a hundred years. Joseph F. Breck and Charles H. Breck, both members of this firm, are president and treasurer, respectively, of the new corporation. Mr. Alfred E. Robinson, who for twenty years has been connected with New York and New England Nurseries, is vice-president, and will take charge of the nursery and experimental grounds, which are located at Lexington. Mr. Sheldon A. Robinson is secretary and also director of the Landscape Department of the nursery. Catalogue will be forwarded upon application.

CITRUS NURSERY

The R. A. Conkling Nursery Co. of Fellsmere, Fla. has been organized by R. A. Conkling, R. A. James and M. E. Hall. In addition to citrus fruits, shade and ornamental trees and shrubs, roses and palms will be grown. —*The Florists' Exchange*.

INCORPORATED

Cedar Hill Nursery & Orchard Co., Nashville, Tenn. capital stock, \$30,000. Incorporators, J. H. Lanier, J. W. Shadow, Arthur Crownover, J. M. Littleton and J. E. Vaughn.—*Horticulture*.

McHUTCHINSON & CO. ENTER NEW FIELD

Probably the first shipment of nursery supply material sent from the port of New York to Australia was made by McHutchinson & Co., importers, of 17 Murray St., New York about the middle of April. This consisted of a shipment of colored Madagascar raffia, a commodity handled in large quantities by this firm.

It appears that the ill-fated Titanic carried no nursery stock for the port of New York.

Easter week 1912 with New York florists was one of the busiest and most successful on record.

Our Book Table

THE BEGINNER'S BOOK OF GARDENING, Harry Roberts. Published by John Lane, London and New York. 88 pages. 5" x 7½". Illustrated.

For a small book, this volume treats a large number of subjects. Being intended for beginners, it discusses elementary things connected with the care of a garden, and the author expresses what he has to say very clearly and in few words. For instance, the chapter entitled "The Nature of Soil," while containing less than two and one-half pages, gives an idea of the composition of soil, the nature and productive value of different types, and ways of adding to soil the necessary elements for plant growth. This chapter is illustrative of the concise way in which the writer states the common facts concerning the growing of vegetables, flowers, and ornamental shrubs. Sixteen excellent illustrations add to the interest of the book.

THE GREENING PICTORIAL SYSTEM OF LANDSCAPE GARDENING

This large volume by Charles E. Greening was prepared with the intention of describing more by pictures than by words the system used by the author. It is indeed very attractively illustrated with views in grounds that have been arranged by the Greening Landscape Company. The open lawn treatment is one of the noticeable features. Much attention is given to the use of hardy shrubs, and the desirable trees for different situations are noted. The plates number two hundred, and these illustrate landscape gardening as actually practiced in spacious country homes, on crowded city lots, on college grounds, near places of business, on broad avenues, and in a score of other places. The text is very suggestive, and can not but be of great assistance, especially in its correlation with the profuse illustrations—to those who desire to bring art to the aid of nature in beautifying their grounds.

MR. FARMER WRITES ON THE STRAWBERRY

Early this spring Mr. L. J. Farmer of Pulaski, New York, published a book on strawberry culture, by means of which he desires to impart to others some of the knowledge gained by nearly thirty years' experience with berry fruits, particularly strawberries. More than half of this book of nearly one hundred pages concerns strawberries,—their setting, cultivation, picking, marketing, and so forth—and nearly twenty pages are devoted to a discussion of the work for which Mr. Farmer is well known, that with fall bearing strawberries.

WESTERN NEW YORK HORTICULTURAL SOCIETY PROCEEDINGS IN BOOK FORM

A volume of nearly 300 pages just came from the press. John Hall, secretary, who is noted for his promptness, is the editor and compiler. As usual the report is a very good one.

A member of the Western New York Horticultural Society writes: "The 'Proceedings' of this Society for the current year has been received by us. It is a book of some 300 pages, nicely illustrated, and full of instruction and inspiration on a varied number of subjects interesting to the fruit-grower. It is a mystery to us how the Society can afford to publish so expensive a book and mail free to members, all for one dollar per year, and we wonder that every fruit-grower in the State is not a member." The book is mailed only to members, but those interested can address John Hall, secretary, 204 Granite Building, Rochester, N. Y.

P. D. Berry, the wholesale nurseryman of Dayton, Ohio, made the largest shipment of raspberry plants that ever left that city, April 10th. This stock was sold in one order to a Wisconsin nurseryman. It required nine teams to haul it from the nursery to the car.

MT. HOLLY, N. J.—The Morris Nursery Co. has been incorporated with a capital stock of \$50,000. Incorporators: G. Lear and Geo. Achelis, both of West Chester, Pa., and Fritz Achelis, New York.

Book Reviews

THE AMERICAN NEWSPAPER ANNUAL AND DIRECTORY. 1414 pages, royal octavo, cloth, \$5.00 net, carriage extra, postage 60 cents. Published by N. W. Ayer & Son, Advertising Agents, Philadelphia.

The forty-fourth year of continuous publication brings us the 1912 edition of this comprehensive review of the newspaper and magazine field. To the publishers of this country and to those having dealings with them this work is most useful. The facts and figures pertaining to each of the 24,345 publications listed are presented in a condensed and get-at-able form.

The Annual and Directory is now the only publication of its kind which is compiled from information gathered each year from original sources. Mr. George P. Rowell was the first to compile such a work, and for many years he issued the American Newspaper Directory in the interest of publishers and advertisers. Following his death, the Directory, with its records, copyrights and property was sold to N. W. Ayer & Son, who combined it with their Annual.

A specially valuable feature of the present volume is the population of over eleven thousand towns, little and big, as given by the recent U. S. Census.

As always, special attention has been given to the important matter of circulation figures. Where satisfactory signed or sworn statements have been made these figures are presented; otherwise the editor of the Annual has estimated the circulation from the best and latest information at his command.

Supplementary to the general catalogue are 201 lists of daily papers, magazines, women's publications, mail-order publications, agricultural, religious, and the various trade and class papers, each class listed under a separate head. This useful feature of the book is kept fully abreast of the times, as is indicated by three of its headings: Aeronautics, Moving Pictures and Esperanto.

The Annual and Directory likewise presents a vast amount of up-to-date gazetteer information showing the transportation, banking and other facilities of every town in which a newspaper is published, together with references to its leading industries and characteristics. This feature is supplemented by a specially prepared map of each state, showing every newspaper town. Convenience and conciseness have been carefully studied throughout, and the book places at the disposal of publishers, of advertisers, of business men, of students, librarians, etc., a vast amount of fresh information not to be procured elsewhere.

Verkade Van Kleef, Nova Nurseries, formerly of Boskoop, Holland, has moved his office to larger quarters. His address should now read, Verkade Van Kleef, Nova Nurseries, Waddinxveen, near Boskoop, Holland.

J. F. Rosenfield, Paeonia Specialist, of West Point, Nebr., has moved his home and peony gardens to Benson, Omaha, Nebr.

On account of orchard interests I appreciate your articles on peach and apple orchards.

Pennsylvania, W. E. GROVE.

Herewith is \$1.00 for your valuable paper.

B. C. R. C. McNAUGHTON.

NATIONAL NURSERYMAN,

Enclosed please find post office order of \$1.00 for the NATIONAL NURSERYMAN for one year. The NATIONAL NURSERYMAN is pleasing and beneficial.

South Dakota. J. R. JONES.

NATIONAL NURSERYMAN,

Kindly enter our name on subscription list. Sometime back I sent for a sample copy, February was sent. This one copy contained an article worth the full cost of the year. I allude to the reply of Meehan on tree and shrub storage.

PINE GROVE NURSERY FARMS.

Spring Valley, N. Y.

EXPORTS OF MANUFACTURES APPROACHING THE BILLION DOLLAR LINE

The value of manufactures passing out of the United States in the calendar year 1911 may exceed one billion dollars. This estimate is based upon figures of the Bureau of Statistics, Department of Commerce and Labor, covering the exports of manufactures in the nine months ending with September, 1911, which amount to four hundred seventy-eight and one-half million dollars for finished manufactures and two hundred forty and one-half million for manufactures for further use in manufacturing, making the total exports of manufactures in the period named seven hundred nineteen million dollars, against six hundred twelve million in the like period of 1910. The increase in the 9 months of 1911 over the like period of 1910 is 17.48 per cent, and in case the increase during the remainder of the year continues at the same rate the total value of manufactures passing to foreign countries during 1911 will be about nine hundred seventy million dollars. When to this is added the value of manufactures going to Alaska, Porto Rico and Hawaii, not included in the exports to foreign countries, the total outward movement of manufactures from continental United States in 1911 will pass the billion dollar line. This will bring the total value of manufactures exported in 1911 to more than twice that of ten years ago and more than five times that of 20 years ago, the exports of manufactures in 1901 having been four hundred forty-seven and one-half million, and in 1891 about one hundred eighty-five million dollars.

Practically all the leading articles of domestic manufacture show increased exports when compared with the preceding year, many of them making new high records in the year now approaching its close. Iron and steel manufactures, which head the list of domestic manufactures exported, give promise of a total of two hundred fifty million dollars in the calendar year 1911, compared with two hundred one million in 1910 and one hundred two and one-half million in 1901, a decade earlier. Copper manufactures, including pigs, bars, etc., will approximate one hundred million dollars in the year's exports, compared with ninety-four million in 1910 and thirty-three and one-half million in 1901. Refined mineral oil will also exceed one hundred million dollars in the calendar year 1911, as against eighty-nine million last year and sixty-seven million in 1901. Wood manufactures give indications of exceeding ninety million dollars in 1911, compared with eighty-two million in 1910 and forty-six million in 1901.

The gains shown in the four great classes of manufactures already discussed are typical of those made in other important classes of less magnitude in the export trade. The indicated totals in the full year's export trade are, in the case of agricultural implements, nearly forty million dollars, compared with thirty-one million last year; and seventeen million a decade ago; cotton manufactures, forty-five million dollars in 1911, against thirty-five and one-half million in 1910 and twenty-six million in 1901; leather and its manufactures, fifty million dollars, compared with fifty-three and one-half million last year and twenty-nine million a decade ago; chemicals, etc., twenty-three million dollars in 1911, compared with twenty-two million in 1910 and fourteen million in 1901; and cars and carriages, about thirty-five million dollars in 1911, against twenty-five million in 1910 and eleven million in 1901. A noteworthy feature in this last named class is the rapid development of the export trade in automobiles, which has risen from less than a half million dollars in the last half of the calendar year 1901, the earliest period for which the record was kept, to 13 million in 1910 and an indicated total of 15 million in the year ending December next.

A study of our exports as to countries of destination indicates a world-wide distribution of domestic manufactures, such industrial centers as the United Kingdom, Germany, and Belgium sharing with agricultural and comparatively undeveloped sections such as Canada, Argentina, Mexico and China in their increasing purchase of American manufactures. Under the head of iron and steel manufactures, for example, our typewriters are sold chiefly in Great Britain and Germany; our metal-working machinery, in Germany and the United Kingdom, with France and Canada as other important markets. Our sewing machines are exported principally to the United Kingdom, Germany, and Brazil; and our steel rails, mostly to Canada, though Japan, Argentina, Mexico and oriental countries are also important markets.

Canada, the United Kingdom, and Australia are the leading market for American automobiles exported. Our exports of agricultural implements to Europe (chiefly Russia, France, and Germany) exceed the combined exports thereof to all other parts of the world, though as single markets Canada and Argentina rank next to Russia. American leather is exported largely to the United Kingdom, Germany, and Netherlands; boots and shoes, chiefly to Cuba, Canada, and the United Kingdom. American cigarettes are exported mostly to India and China; plug tobacco to Australia; and American illuminating oil in large quantities to China, the United Kingdom, Germany, Netherlands, Japan and India, and in not inconsiderable amounts to countries representing every grand division of the globe.

WHO HE MOURNED

O'Toole—"An' why are yez wearin' mournin', Muldoon?"

Muldoon—"Shure an' Oi hov t'. Th' iditor ov a magazine Oi 've been takin' wrote me yisterd'y an' sed thot me subscripshun hod expired."—*Judge*.

A CURE FOR GLOOMY DAYS

"When days are dark and gloomy,
And things seem all askew,
Just *manufacture* sunshine,
Just think of skies all blue;

Just think of things all cheerful,
And sing a happy song,
And hunt up things to *laugh* about,
To help the day along.

Make those about you cheerful
With merry words and smile;
The clouds *can't* last forever;
Forget them for a while.

So manufacture sunshine,
And defy the gloomy day;
And almost before you know it
Clouds will have passed away."

THE NATIONAL NURSERYMAN,
Rochester, N. Y.

Kindly continue "ad" in your paper and send invoice. Results received were very good indeed.

Yours very truly,

CONYERS B. FLEU, JR.

PROGRESS ON THE PROGRAM

Chairman Maloy, of the Program Committee, has been adding to the list of speakers at the Boston meeting, and now reports as follows:

There will be papers by Jackson Dawson, Arnold Arboretum, Jamaica Plain, Mass.; William C. Barry, Rochester, N. Y.; S. Mendelson Meehan, Thos. Meehan & Sons, Dresher, Pa.; D. S. Lake, Shenandoah, Iowa; J. B. Pilkington, Portland, Oregon.

Mr. George S. Josselyn has also promised to write a paper on "Reminiscences of a Massachusetts Yankee."

This year we propose to have an innovation in the way of a Question Box, to be presided over by Mr. J. M. Pitkin, of Newark, N. Y.

Catalogues Received

J. K. Alexander, the Eastern Dahlia King, East Bridgewater, Mass. Catalogue and Cultural Guide for 1912.

Blue Hills Nurseries, Hartford, Conn., W. W. Hunt & Co. General Catalogue. A real good looking catalogue.

The Elm City Nursery Co., New Haven, Conn. 1912 Catalogue. This is an attractive catalogue and will appeal to the average person, on account of the arrangements of the lists—the common names being given prominence, while the Latin names are also inserted in such a way as to leave no doubt, thus making it easily understood.

Elizabeth Nursery Co., Elizabeth, N. J. Wholesale trade list for spring, 1912.

Willadean Nurseries, The Donaldson Company, Sparta, Ky. Wholesale price list for spring, 1912.

Mount Arbor Nurseries, E. S. Welch, Shenandoah, Iowa. Bulletins 1 and 2, with wholesale prices.

W. & T. Smith Company, Geneva, N. Y. Wholesale trade list for spring, 1912.

Forest Nursery & Seed Company, McMinnville, Tenn. Wholesale trade list for 1912.

Chase Nursery Co., Huntsville, Ala. Bulletin No. 4, spring, 1912.

J. Van Lindley Nursery Co., Pomona, N. C. Wholesale list of prices.

J. K. Henby & Son, Greenfield, Ind. Wholesale trade list.

Willis Nurseries, Ottawa, Kans. Trade List of nursery stock.

The Wm. H. Moon Company, Morrisville, Penn. Mailing card.

Fred Haxton, 4717 Winthrop Ave., Chicago. A small sized, neat appearing catalogue of Hardy Shrubs, with numerous illustrations.

Chase Bros. Company, Rochester, N. Y. Wholesale price list for spring, 1912. Bulletin No. 4, No. 6, No. 7.

Ward Dickey Steel Co., Indiana Harbor, Ind. "Box Straps."

Jewell Nursery Co., Lake City, Minn. Want List. Also Surplus List.

E. Gill Nursery Co., West Berkeley, Calif. Rose leaflet.

The Van Dusen Nurseries, Geneva, N. Y. Surplus List.

Charlton Nursery Co., Rochester, N. Y. Bulletin No. 5, surplus list; also want list.

G. W. Van Gelderen, Boskoop, Holland. A very neat and attractive wholesale trade catalogue of rhododendrons, azaleas, roses, hardy ornamental trees, and shrubs, conifers, herbaceous plants, etc.

Brown Brothers Company, Continental Nurseries, Rochester, N. Y. Surplus list.

Ellwanger & Barry, Rochester, N. Y. Surplus list.

Texas Nursery Co., St. Louis, Mo. Box list of exceptionally good stock in cold storage.

Jackson & Perkins Company, Newark, N. Y. Bulletin No. 3. Remarkable offer of a superb lot of rhododendrons.

Fraser Nursery Co., Huntsville, Ala. Bulletin of April 6th. Surplus list.

Huntsville Wholesale Nurseries, Huntsville, Ala. Surplus Stock Bulletin No. 5.

Geo. H. Walker, North Dighton, Mass. Pocket Catalogue of Dahlias.

Jac. Smits & Co., Naarden, Holland. Wholesale catalogue for season of 1912 and 1913. American Edition. Prices quoted in American money, and catalogue neatly indexed as to varieties.

J. G. Harrison & Sons, Berlin, Md. Surplus list.

Greening Nursery Co., Monroe, Mich. Surplus list.

Brown Bros., Rochester, N. Y. Continental Nurseries. Surplus list.

Chase Nursery Company, St. Louis, Mo. Bulletin No. 8 Surplus list.

The Chanute Nurseries, Chanute, Kans. Surplus list.

C. A. Nobelius, Gembrook Nurseries, Emerald, Victoria, Australia. Catalogue of fruit trees, elms, planes, oaks, poplars, and other deciduous and ornamental trees.

Bobbink & Atkins, Rutherford, N. J. General catalogue beautifully illustrated.

Evergreen Nursery Co., Sturgeon Bay, Wis. Surplus list.

Xenia Star Nurseries, Xenia, Ohio. Bulletin No. 2.

R. H. Bath, Ltd., Wisbech, England. Special trade list of chrysanthemums, carnations, paeonies, clematis, herbaceous plants, roses, raspberry canes, strawberry plants, etc.

F. W. Kelsey Nursery Co., 150 Broadway, New York. "Everything worth planting" is the title given to this neat appearing catalogue.

W. N. Scarff, New Carlisle, Ohio. Semi-annual Surplus List of Choice New and Standard Bush Fruits.

Sherman Nursery Co., Charles City, Iowa. Surplus list.

The Huntsville Wholesale Nurseries, Huntsville, Ala. Bulletins No. 2, No. 3, No. 4 and No. 5. of Surplus Stock.

F. H. Stannard & Co., Ottawa, Kans. Wholesale trade list.

Stark Bros. Nurseries & Orchards Company. Trade Special.

Conrad Appel, Darmstadt, Germany. Seed Catalogue.

W. C. Reed, Vincennes, Ind. Bulletin No. 2.

Fraser Nursery Co., Huntsville, Ala. Boxed lots in cold storage, April 6th.

Peter Henderson & Co., Cortlandt St., New York. "Everything for the lawn." Also implement catalogue.

Cayeux & Le Clerc, 8 Quai de la Mégisserie, Paris, France. 1912 catalogue.

Chas. L. Mann, Milwaukee, Wis. Card descriptive of Mann's Plant Labels.

The "New-Way" Motor Company, Lansing, Mich. Circular of "Rapid" Sprayers, etc.

L. J. Farmer, Pulaski, N. Y. April, 1912, Bargain Price List.

Harrison's Nurseries, Berlin, Md. Price list of trees and shrubs. Wholesale surplus list.

Felix & Dykhuis, Boskoop, Holland. Wholesale trade list 1912 and 1913. American edition.

I. E. Ilgenfritz' Sons Co., Monroe, Mich. Surplus List No. 2.

STANDARD AGRICULTURAL BOOKS

WEEDS AND HOW TO ERADICATE THEM, by Thomas Shaw, giving the names of the most troublesome weed pests east and west and successful methods of destroying them. Price, 16 mo. cloth, 210 pp., 50 cents; paper, 25 cents.

FARM WIND-BREAKS AND SHELTER BELTS by Samuel B. Green. A manual of tree planting for wind-breaks and shelter with description of the most suitable trees hardy enough to stand Northwestern conditions. Practical cultural directions from seed to maturity. Illustrated. 69 pp., Price, paper. 25 cents.

ELEMENTS OF AGRICULTURE, by J. H. Sheppard and J. C. McDowell, a complete treatise on practical agriculture covering plant and animal breeding thoroughly illustrated. A complete text book adopted in public and agricultural schools throughout the Northwest. 12 mo cloth, 100 pp., Price, \$1.00.

POULTRY MANUAL, by Franklane L. Sewell and Ida E. Tilson. A safe guide to successful poultry culture in all its branches, fancy and practical; breeding and feeding; diseases and remedies; how to make farm poultry pay, etc., etc. 12 mo, 148 pp., Price 50 cents; paper, 25 cts (40th thousand).

EVERGREENS AND HOW TO GROW THEM, by C. S. Harrison. A complete guide to selection and growth of evergreens for pleasure and profit, from seed and nursery, to wind-breaks, and hedges. Illustrated. Price, 12 mo. cloth 100 pp., 50 cents; paper, 25 cents.

AMATEUR FRUIT GROWING by Samuel B. Green, a practical guide to the growing of fruit for home use and the market, written with special reference to a cold climate. Illustrated 134 pp., Price, 12 mo., cloth. 50c; paper 25 cents.

VEGETABLE GARDENING, by Samuel B. Green, 10th edition. A manual on the growing of vegetables for home use and the market, profusely illustrated 252 pp., Price, 12 mo. cloth, \$1.00; paper, 50 cents.

GRASSES AND HOW TO GROW THEM, by Thomas Shaw, covering name and character of all the principal grasses in America: temporary and permanent pastures; methods in making hay, etc. Illustrated, 453 pp., Price, 12 mo. cloth, \$1.50.

POULTRY HOUSES, COOPS AND EQUIPMENTS, by H. A. Nourse. (editor of the Poultry Herald). A book of newest plans for building practical up-to-date poultry houses, with description of coops, fixtures and poultry utensils for the farm or village poultry keeper. Profusely illustrated 100 pp., Price, paper 25 cents.

EGG MONEY HOW TO INCREASE IT, by H. A. Nourse. A book of complete and reliable information on the more profitable production of eggs on the city lot, the village acre and the farm. The instruction in this book will make the "200 eggs a year hen," a reality for the intelligent poultry man. 128 pp. completely illustrated. Price, paper, 25 cents.

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FEEDING AND MANAGEMENT OF LIVE STOCK, by Thomas Shaw. A series of lectures on the principles covering selection, feeding, breeding, management and marketing of cattle, sheep and swine. 100 pp., Price, 8 mo cloth, \$1.00, stiff cover, 50 cents.

STANDARD BLACKSMITHING, HORSESHOEING AND WAGON MAKING, by J. G. Holmstrom, author of Modern Blacksmithing, gives practical instructions by a successful blacksmith. The latest and most complete book on the subject published. Thoroughly illustrated. Price, 12 mo., cloth, \$1.00.

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HARDWOOD LANDS, by D. A. Wallace, describes the characteristics of Minnesota and Wisconsin cut-over timber lands heretofore overlooked as suitable for agriculture. Illustrated. Price, paper, 25 cents.

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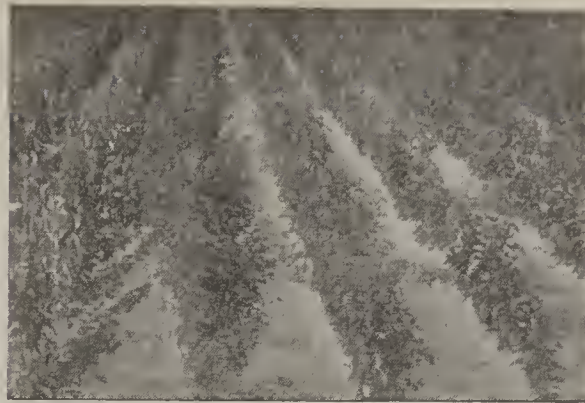
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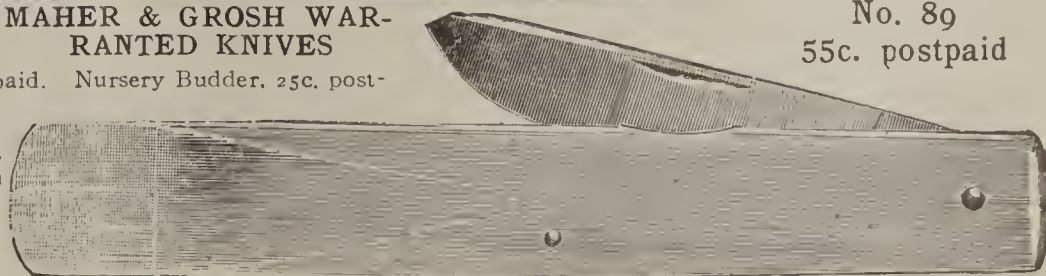
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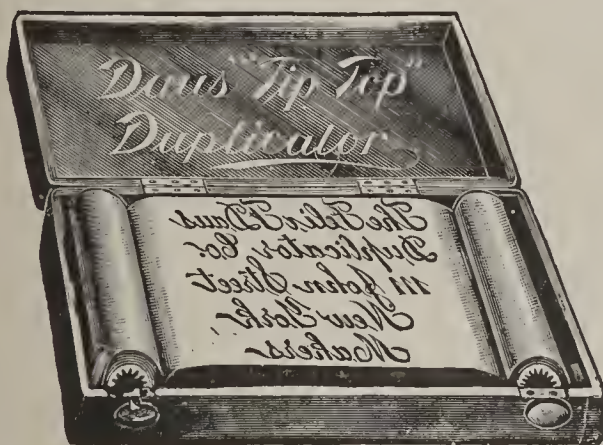
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Admiral Dewey	70	25		20		75
Apex			200			
Buston's Oct.	40	15	40			100
Capt. Ede					500	
Carman					900	
Chilow	20	10				50
Chinese Cling	50	5				135
Cobbler	25		80			60
Cornelia	125	30	25			100
Connett's So. Early				75	75	
Crawford Early				200	200	
Crawford Late					500	
Denton	300	150	200		100	200
Early Michigan	40	30	10			100
Early River				10		100
Early York				10		50
Easton Cling	40	30	10			50
Elberta Cling						50
Emma	20					25
Ethel's Yellow	40	15	10			90
Eureka	80	10	40			150
Fitzgerald					200	
Ford's Lt. White					100	
Foster				330	200	
Fox Seedling					2000	
Geary's Hold On	500				100	500
Globe			300	250		
Gold Drop	25					75
Gold Mine	70					30
Greensboro					1500	
Harrison Cling	60		300	150	100	
Holland Cling	25	20				60
Hughes I. X. L	65	25	30	20		90
Illinois						100
Jennie Worthien	20	20				20
Kalamazoo	100				100	100
Lee's Cling	30	10				80
Levy's Late	500	65	60			400
Lodge	80	20	20		10	100
Lorentz	20					150
Lowell	60		20			50
Lyndon Cling	20	75	20			100
Mamie Ross					400	
Mayflower	1000		25	1500	150	400
Moore's Favorite						1000
Newington Cling	50	20				100
New Prolific	1000	400	400		100	100
Niagara					200	
Nina Cling	60	50	10			90
Old Mixon Cling	70	20	20			100
Phillips Cling	10					

PEACHES—Continued						
	5-6	4-5	3-4	2-3	1-2	6-7
Preston Cling	50	35	20			170
Prize					250	
Red Bird	10		10			50
Reeves' Favorite					50	
Salway						1500
Sea Eagle	30					70
Slaphey	200					10
Sneed	75					30
Snow Orange	100	40	40			60
Stephen's R. R.					1500	
Stinson's October	30	30				100
Stonewall Jackson	70	10	10			130
Stump	2000				3000	200
Sunrise Cling	80	40	20			90
Troth's Early						25
Uneeda Cling	80	30	15			90
Victor	50	10	10			80
Waddell	400					
Wager						40
Walker's Free	60		10			30
Waterloo	80	25	10			125
Washington	60	30	30	10		125
Wheatland		175				50
Wheeler's Late	50	10	10			100
Worth	40		25			30
Yellow St. John	300		100	75	75	
Christiana	10					20

PEARS						
	1	6-7	5-6	4-5	3-4	2-3
Bartlett		700	300			
Clapp's Favorite		100	200			80
Flemish Beauty			200	50	50	
Garber		50				
Kieffer	2000	8000				
Koonce			100	150	100	25
Lawson		50	50			
Le Conte					100	
Manning		100	100	40		
Vicar		25	50	50		
Vermont Beauty		30			40	40
Wilder		30	30		40	

CHERRIES						
	6-7	5-4	4-5	3-4	2-3	
Baldwin		300				
Belle de Choiccy		100				
Black Tartarian			200			
Dyehouse		200				
Early Richmond		3000	4000	4000	1500	
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THE NATIONAL NURSERYMAN



JUNE, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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looking for stock can find largest assortment in the
United States at the

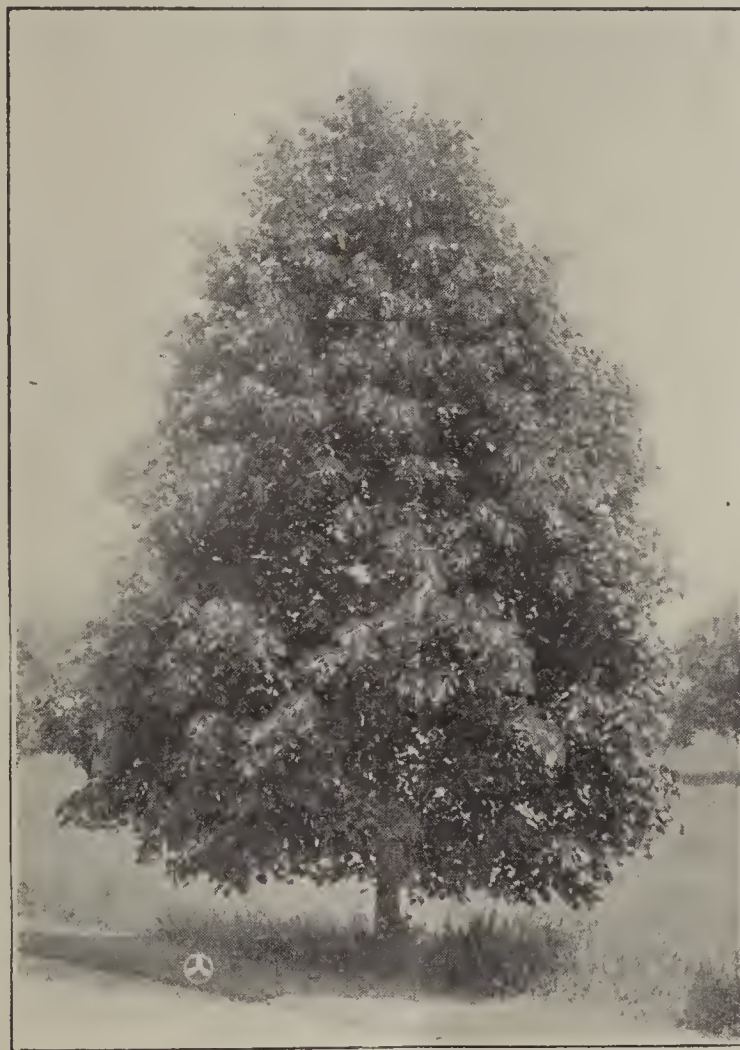
Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses, Vines and
Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds, Palms
and other tender Greenhouse Plants

Have a large stock stored in frost proof cellars that can be shipped at any time desired;
switch from N. Y. C. lines direct into our packing house; can load without exposure.
Unsurpassed facilities for handling orders large or small. Catalogs and price lists free.

A few specials while they last:

STANDARD PEARS in assortment DUCHESSE DWARF PEARS BOURGEAT QUINCE
PRUNUS PISSARDI and TRILOBA CUTHBERT AND OTHER RASPBERRIES
CONCORD AND OTHER GRAPES



AMERICAN LINDEN

Our Specialties are: Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

When writing to Advertisers please mention The National Nurseryman.

FOR FALL, 1912

AMERICAN

ELMS...

Norway Maples

SPLENDID TREES

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

AND NOW,—

When you are thru your packing, and your planting is under way, and you can find time to look around and revise the plate-book for the 1912 campaign, write us about the J. & P. SPECIALTIES and good things in ROSES, new and old, CLEMATIS, and shrubs like TREE HYDRANGEAS, TREE LILACS, AMPELOPSIS, etc. Of some things we have a rather larger stock than usual for 1912-1913 season, and we think we could be induced to make very attractive prices on some early orders.

Now is the time to buy FERTILIZER SOWERS. We sell good ones. And BUDDING KNIVES and RAFFIA.

When you are buying, *no matter what*, send an inquiry to the J. & P. people. Costs a stamp; sometimes saves a lot.

JACKSON & PERKINS COMPANY

"Grow specialties—Sell everything."

Distributors of the "Preferred Stock"

Grown at NEWARK, which is in Wayne County,
NEW YORK STATE.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.
INCORPORATED

Fruitland Nurseries
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.



Biota Japonica Filiformis.

CONIFERS
BROAD-LEAVED
EVERGREENS
DECIDUOUS
SHRUBS
WEEPING
MULBERRY
PEACHES
OTHER FRUITS

The Best Tree Digger on Earth



Used and Recommended by Leading Nursermen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.
LOUISIANA, MO.

Hill's Evergreens



Orders for Evergreens for August and September planting should be placed at once; we are now booking orders and will be glad to answer your questions. We specialize on Evergreen Seedlings and Transplants for Nurserymen's and Dealers' Use, Lining Out, etc., and grow millions each year from the seed—all leading varieties.

Visitors to the A. A. N. Convention at Boston who can stop at Dundee will be made welcome and will find our display well worth coming to see.

If you cannot come, do the next best—write for our Wholesale Catalog, free to you.

The D. HILL NURSERY CO., Inc.
Evergreen Specialists

D. HILL, President Box 401, DUNDEE, ILLINOIS

LARGE SURPLUS

APPLE

GRIMES GOLDEN
INDIAN
JONATHAN
M. BLUSH
N. W. GREENING
PEWAUKEE
RAMBO
ROME BEAUTY
STARK
STAYMEN'S W. S.
TULPEHOCKEN
WINESAP
YORK IMPERIAL

PEACH

CARMAN
CHAMPION
EARLY CRAWFORD
LATE CRAWFORD
O. M. FREE

PLUM

BURBANK
ABUNDANCE
MOORE'S ARCTIC
REINE CLAUDE
SHIPPER'S PRIDE

CHERRY TREES

FOR SALE IN CARLOAD LOTS

MONTMORENCY
BALDWIN

E. RICHMOND
DYE HOUSE

ENG. MORELLO

APPLE SEEDLINGS
STRAIGHT ROOTS

$\frac{3}{16}$ -in. up.
Price very reasonable

C. M. HOBBS & SONS
BRIDGEPORT, : : INDIANA

Highland Nursery

Headquarters for Hardy American
Broadleaved Evergreens

This means those finest of all native American shrubs—

RHODODENDRONS

AZALEAS

KALMIAS

and the like. Try us on handsome

Carolina Perennials

One of our specialties collected at 3800 feet elevation. We have outgrown our Salem nurseries and will be found with plenty of ground for field expansion at Boxford, Mass.

HARLAN P. KELSEY
SALEM, MASS.

When writing to Advertisers please mention The National Nurseryman.

Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Fall of 1912 and Spring of 1913 in large quantities as usual:

SPECIALTIES

APPLES—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.

PEARS—Kieffers, one and two years old. A much smaller crop than heretofore.

CHERRIES—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.

CHERRIES—On Mahaleb. One and two years. Ea. Richmond, Dychouse, Montmorency, Wragg, Royal Duke, in small supply.

PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

ROSES—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

PRIVET—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.

PECAN SEEDLINGS—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,
in several hundred
kinds and varieties

ROSES, in all kinds
and varieties

RHODODENDRONS, Hardy,
ENGLISH HYBRIDS,
Maximum and Catawbiense

BOXWOOD, in all shapes,
forms and sizes

HARDY AZALEAS, in all
colors and varieties.

HEDGE PLANTS, in all
popular kinds

FLOWERING SHRUBS, in
bush and standard forms
in hundreds of kinds
and varieties

SHADE TREES, in hundreds
of useful and attractive
varieties

MAGNOLIAS and other
FLOWERING TREES

WEeping and STANDARD
TREES, in many varieties

JAPANESE MAPLES, in all
varieties and colors

HARDY TRAILING VINES
and CLIMBERS

HARDY VINES and CLIMBERS
in pots

SPRING and SUMMER
FLOWERING BULBS, ROOTS
and PLANTS

PALMS and BAY TREES by
the thousands

FRUIT TREES,
home-grown, imported,
DWARF and TRAINED

SMALL FRUITS, in all
kinds and varieties

NUT TREES, profitable
kinds

OLD-FASHIONED, Hardy
FLOWERING PLANTS, in
thousands of kinds and
varieties

PAEONIAS, IRIS, PHLOX
FERNs,
and HARDY GRASSES

KITCHEN
HERBS and ROOTS

RUTHERFORD PARK LAWN
GRASS SEED

AUTUMN BULBS, Dutch,
French and Japanese kinds

Interior and Exterior
DECORATIVE PLANTS, in
a large variety

PLANT TUBS, in all shapes and
sizes. Ask for special list

VISITORS to our nurseries
are always welcome

SEND IN YOUR LISTS FOR
QUOTATIONS

Nurserymen, Florists and Planters
RUTHERFORD, N. J.

RAFFIA

We offer four brands of Raffia that are especially adapted to meet the different requirements for which Raffia is used.

"RED STAR" BRAND

"ARROW" BRAND, "XX SUPERIOR"

"AA WESTCOAST"

With these brands we are in a position to offer both price and quality that will interest you. Send for our price list giving complete description and price of each brand.

We also offer a good line of Budding Knives. List upon request.

THOMAS MEEHAN & SONS

DIRECT IMPORTERS OF RAFFIA

DRESHER, PA.

THE HIGHWAY TO PERENNIALS

Leads straight to the

Palisades Nurseries

THERE you will find all kinds and you can take your pick from the best that grow.

We are headquarters for perennials and assure the widest latitude in choice as well as the most courteous promptitude in correspondence and service. Our motto --- Maximum Quality at Minimum Cost. Write

THE PALISADES NURSERY

Sparkill, N. Y.

R. W. CLUCAS, Manager

The McFarland Organizations at the Boston Convention



SPECIAL effort will be made to give every nurseryman in attendance upon the Boston Convention proper opportunity to make such inquiry as he may elect regarding the product and service of The McFarland Organizations.

At the St. Louis meeting our force was altogether inadequate to meet the demands for information, figures, etc., and a number of our friends failed to secure the interviews which they had expected to have with our representatives.

Mr. McFarland, who was unable to go to the convention last year, plans to be on the job at Boston. Mr. Thomas and Mr. Beckley, whose inability to get more than twenty-four hours into a day at the St. Louis convention caused the disappointment of some of our friends, will again break union rules in their effort to see everybody who is willing to be seen. Mr. Burgess, one of the field men of The McFarland Publicity Service, will give his assistance in taking care of the situation.

Our exhibits will be more complete than at any preceding convention, and more than ever worthy of study. In the greatly increased volume of business we have handled during the fiscal year just ending there has been represented a much wider range of work than in previous years. The McFarland product is demonstrating that it is as efficient when employed in the selling effort of various other lines of trade as it has for so long proved itself for nurserymen, seedsmen and florists.

We shall be very glad to give careful and prompt response to communications from firms which may wish to get something under way before the Convention meets or who may not be represented at the meeting. The opportunity to secure the service of experts in publicity, photography and printing, at rock bottom prices, referred to in our last month's NURSERYMAN insert, remains open. We will make it a whole lot worth your while to let us do *now* any printing you expect to order of us for the coming season.

Meanwhile, if any of our near-competitors are seeking to convince you that their work may be cheaper because it costs less, we believe you will find of more than passing interest the articles on the other side of this sheet. For it, we are indebted to Ward's Works, a Pittsburgh paper periodical. Doubtless, you have often wondered *why* printers' estimates on the same specifications differ so. That they *don't* will be clear to you when you have read this article, and have noted its convincing explanation of wherein specifications sometimes fail to specify fully.

THE MCFARLAND ORGANIZATIONS

Mount Pleasant Press • Harrisburg, Pa.

J. HORACE MCFARLAND COMPANY
Constructors of Catalogues

THE MCFARLAND PUBLICITY SERVICE
Builders of Business

“ Why Do Printers’ Estimates on the Same Specifications Differ? ”

The answer is that **they don’t**.

Let us explain.

No specification you or anybody else ever made was complete.

All the estimates you ever received on a printing proposition differed on the thing that you didn’t specify—**Quality**.

Each printer quoted you on **his** quality.

Now listen !

There are only two things you can specify with exactness on a printing order—paper and size.

Everything else is **Style**.

Style consists of design, taste and workmanship.

The king’s bones and muscles contain the same elements as the pauper’s: the only difference is personality.

”

BERBERRY THUNBERGII SEEDLINGS

OUR SLOGAN:---PLANT FOR PROFIT

Meet Our
Mr. Burr
at the Convention

C. R. BURR & CO.
MANCHESTER, CONN.

PLACE YOUR ORDER NOW FOR NEXT SPRING'S DELIVERY

DREER SPECIALTIES

HARDY PERENNIALS. A most extensive assortment and an immense stock of the leaders, such as Anemone Japonica, German and Japanese Iris, Hardy Phloxes, Pæonies, etc.

AQUATIC PLANTS. Nymphæas, Nelumbiums, Victorias, etc. Over seven acres devoted to water gardening.

ROSES. Three hundred thousand field-grown plants, now in 5 and 6-inch pots. We are particularly strong on the now so popular Hybrid Tea Roses and carry the most extensive assortment.

DECORATIVE PLANTS. Palms, Ferns, Araucarias, Pandanus, Stove and Greenhouse Plants. Nearly seven acres of glass devoted to this class of stock.

BULBS. Dahlias, Gladiolus, Caladiums, Lilies, etc., etc.

HARDY SHRUBS. Rhododendrons, Azaleas, Deciduous Flowering Shrubs, Hardy Vines and Climbers, etc., etc.

BOX WOODS AND BAY TREES. A splendid lot of commercial sizes, of various forms of exceptional quality.

All the above, as well as a full line of other seasonable plants, seeds and bulbs, are described in our Current Wholesale List which we shall be pleased to mail to those in the trade upon request. If you do not receive it regularly write.

HENRY A. DREER

714 Chestnut Street

PHILADELPHIA, PA.

FOREST TREES FRUIT STOCKS

Shipments of over 200 Million of
Trees Annually

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J. HEINS' SONS

HALSTENBEK, No. 152

Near Hamburg, Germany

Largest Forest Tree Nurseries in Europe.

Please write for Catalogue and Forest
Planter's Guide to our American Agent:

OTTO HEINECKEN

287 Broadway
NEW YORK CITY

Have you seen and examined the quality and
finish of our

Rawhide Brand of Shipping
Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA



Mountain Laurel in Arnold Arboretum, Boston, near Hemlock Woods.
Riverway Park, Boston, Showing Shore Planting.

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., JUNE, 1912

No. 6

A ROUND-UP OF THE SEASON GIVEN BY PROMINENT NURSERYMEN ABOUT THE COUNTRY

UNUSUAL COLD IN ALL SECTIONS

1. WHAT WAS THE CHARACTER OF THE WINTER, AND WHAT WERE ITS EFFECTS ON STOCK IN NURSERY ROW?

Winter with us was very severe, temperature going as low as 16 below zero, and at the time we were afraid that there would be a good deal of damage to the stock in the field; but we are very glad to say at this writing that our stock of all kinds, even the tenderest varieties, came through in tiptop shape. We believe this was owing to the fact that we had a rainy fall and an early frost, and the stock was in a well ripened condition when the cold weather came on.

Manchester, Conn.

C. R. BURR & Co.

We had no real difficulty except from sun-scald on hemlock and red spruce; also a little sun-scald generally throughout the nursery.

AMERICAN FORESTRY CO.
S. Framingham, Mass.

The winter was very cold, but we sustained very little loss therefrom. We suffered quite a little from the early rains before the frost was all out of the ground. Stock was washed out on land not on a level.

W. B. WHITTIER & Co.
S. Framingham, Mass.

The winter was very cold and spring came very late. As there was plenty of water in the ground, stock in general came through well in our nurseries.

North Abington, Mass.

W. H. WYMAN.

Severe. Stock wintered well.
Hyde Park, Vt.

F. H. McFARLAND.

Very cold. Evergreens suffered, especially rhododendrons and kalmia.

Callicoon, N. Y.

CHAS. G. CURTIS.

The winter was a very cold one, but of a very even temperature, without the sudden changes that we sometimes have; and taking it as a whole, I consider it a very favorable winter. In this section we have deep snow, and not any break-up, the snow staying with us until spring, so very little injury resulted to stock in the nursery rows.

Johnstown, N. Y.

L. M. EMPIE.

No injury in Geneva so far reported.
Geneva, N. Y.

W. & T. SMITH Co.

We dig and store all our grape vines, and such stock as we have outside has wintered in good condition,—everything covered with snow during the cold winter.

North Collins, N. Y.

WILLETT & WHEELOCK.

The winter has been a very unusual one. A great deal of stock has suffered, particularly evergreens, and more particularly hemlocks and American arborvitae and several varieties of American pines have been burned.

BOBBINK & ATKINS.

Rutherford, N. J.

We have had a long, hard winter, the frost in pretty deep, and a great deal of strong, dry wind; this has been particularly hard on evergreens,—all classes of yews, thuyopsis, many arborvitae, ilex, as well as California privet, stephanandra and shrubs of like type.

ANDORRA NURSERIES.
Chestnut Hill, Pa.

Our winter was severe. The loss from frozen stock is the worst in the last twenty years.
THE CONARD & JONES Co.

West Grove, Pa.

The winter was very severe, but very little stock damaged in this locality, though we hear of some blocks of peach trees that were planted on low ground that were very badly winter killed.

Kennett Square, Pa.

THE RAKESTRAW-PYLE Co.

Very severe, but had no bad effects on outdoor stock at my nursery.

Dayton, Ohio.

P. D. BERRY.

The season has been a late one, opening up late, but has remained cool, prolonging the season beyond earlier indications.

Dayton, Ohio.

J. W. McNARY.

Very cold, 27 below zero. Not damaged much, except sweet cherries.

Beverly, Ohio.

W. F. MITCHELL & SON.



Members of the P. J. Berckmans Co. enjoying an unusual sight for Georgians.

Very cold, and continued over a long period. Stock in nursery rows not damaged.

New Carlisle, Ohio.

W. N. SCARFF.

As our stock matured nicely last fall, most of our fruit stock went through the winter in fairly good shape, except some tender varieties. Our heaviest loss was in some tender varieties of ornamentals and roses.

Greenfield, Ind.

J. K. HENBY & SON.

We had a very severe winter. Fortunately, we dug our most tender stock and saved it by putting in storage. The early fall rains injured the late growth, and the severe winter did a little damage to our one year old apples. However, we have come out better this spring than expected.

Bridgeport, Ind.

C. M. HOBBS.

Winter has been the most severe ever known at Vincennes. Stand of buds has been hurt considerably. One year sweet cherries were killed, and had to be cut back, also some tender sorts of apple. Sour cherry, one year, not hurt. Shrubbery badly killed. All European plums were killed to snow line.

Vincennes, Ind.

W. C. REED.

Some injury—especially on one year apple.

Vincennes, Ind.

H. M. SIMPSON & SONS.

We had a very severe winter, but in this locality, I don't think much, if any, damage has been done to stock in the nursery row, as we had quite an amount of snow.

Shenandoah, Iowa.

D. S. LAKE.

The winter was very severe, setting in early; but fortunately we had lots of snow during the most of our coldest weather. We had a very dry summer and rains didn't come in time to start late growth, so stock was well ripened when winter set in. On this account, stock suffered less injury from winter in nursery row than during many milder winters in the past.

Shenandoah, Iowa.

E. S. WELCH.

Very severe, but with little wind. Some classes of apple injured in trunk here, but as a rule stock went through all right.

Charles City, Iowa.

SHERMAN NURSERY CO.

Hard winter; considerable damage done.

Topeka, Kans.

J. H. SKINNER & CO.

Unusually cold, but plenty of snow and moisture, and no damage to nursery stock, with the exception of a slight damage to Mahaleb seedlings.

Winfield, Kans.

THE WINFIELD NURSERY CO.

The winter here was continued bad weather from December first to April first,—the worst winter we have had for probably twenty years, not as cold as we have had at times in past, but continuously bad. No injurious effects on nursery stock in rows.

Cleveland, Tenn.

EASTERLY NURSERY CO.

I lost all my peach and a good portion of my one year apples in the plant at Harrisville, W. Va. Stock at Greenbrier, Tenn., came through all right.

Harrisville, W. Va.

R. B. HARRIS.

The past winter in this section was one of the coldest and severest in the remembrance of our oldest inhabitants.

Salisbury, Md.

W. F. ALLEN.

The winter was severe, and did lots of damage to stock in general, especially to peach, privet, cherry, and figs.

Baltimore, Md.

FRANKLIN DAVIS NURSERY CO.

Our winter was a long one with very few days that frost was out of the ground—a very unusual thing in our section, a steady cold. Two below zero was lowest, and that happened but twice during the entire winter. Nothing injured in nursery rows. Never saw stock go through in better shape.

Salisbury, Md.

CHAS. M. PETERS.

We had a most severe winter in this country. However, our stock standing in nursery row was not affected, or little, if any.

Westminster, Md.

THE WESTMINSTER NURSERY.

Winter was cold from about first of January to early in March—then we had plenty of rain with very warm weather, which caused stock to bud very fast, and we could not get out stock before it was pushed very much, especially cherries and peaches. The winter did not hurt anything except some one year sweet cherry.

Richmond, Va.

W. T. HOOD & CO.

The winter was favorable. No cold to do damage to anything, the only unfavorable feature being an excess of rain.

Glen St. Mary, Fla.

GLEN ST. MARY NURSERIES CO.

The enclosed photograph will give you an idea of some of the days we experienced during the past winter. The snow in this picture was six and one-half inches on the level. The winter was especially disagreeable and wet—rain commenced in October and continued the entire winter. It was impossible to get in some parts of our nursery blocks for several weeks, on account of the soft condition of the soil. The planting of nursery stock was, in consequence, delayed, except in elevated sections where the soil was porous. We had to plant practically between rains, but we have had a remarkable strike and everything is making a fine start. Owing to the steady cold, figs were about only stock injured; these were frozen to the ground.

Augusta, Ga.

P. J. BERCKMANS CO.

2. HAVE YOU ANY DIFFICULTY WITH CELLARED STOCK?

We wouldn't have handled the trees in any other way, only out of storage, and we believe if the stock is handled properly after it has been shipped, the results will average better than stock dug fresh from the ground.

Manchester, Conn.

C. R. BURR & CO.

We cellar nothing, and do *not* believe in it.

S. Framingham, Mass.

AMERICAN FORESTRY CO.

No.

S. Framingham, Mass.

W. B. WHITTIER & CO.

To no great extent.

N. Abington, Mass.

W. H. WYMAN.

No cellar.

Callicoon, N. Y.

CHAS. G. CURTIS.

I had no difficulty with cellared stock. When the weather was very cold, I used a little heat to keep the temperature from going below 28 degrees. Did not cellar a great many trees, but had a quantity of small fruits and shrubs in storage.

Johnstown, N. Y.

L. M. EMPIE.

None whatever.

Geneva, N. Y.

W. & T. SMITH CO.

There was little change in temperature, and stock never wintered in storage better.
North Collins, N. Y. WILLETT & WHELOCK.

We do not sell cellared stock, except in roses.
Rutherford, N. J. BOBBINK & ATKINS.

Do not carry cellared stock.
Chestnut Hill, Pa. ANDORRA NURSERIES.

No difficulty with cellared stock.
West Grove, Pa. THE CONARD & JONES CO.

We had no difficulty with cellared stock.
Kennett Square, Pa. THE RAKESTRAW-PYLE CO.

None whatever.
P. D. BERRY.
Dayton, Ohio.

No. No cellar.
W. F. MITCHELL & SON.
Beverly, Ohio.

No.
W. N. SCARFF.
New Carlisle, Ohio.

We lost some stock in our cellar, but the loss was not heavy, as we had packed the stock well and most of it came out in fairly good condition, although in the future we will arrange to have our cellar more nearly frost-proof. We never expected such severe cold to stay with us so long as to penetrate our cellar when we built it, but we find we must prepare for such emergencies.

J. K. HENBY & SON.
Greenfield, Ind.

Cellared stock came through better than usual.

C. M. HOBBS & SONS.
Bridgeport, Ind.

Stock has kept extra well. Had about two degrees frost in cellar during coldest weather, with 30 below zero outside.

W. C. REED.
Vincennes, Ind.

No.
Vincennes, Ind. H. M. SIMPSON & SONS.

We had no difficulty at all with cellared stock. Everything went through in excellent condition.
Shenandoah, Iowa. D. S. LAKE.

Most of our stock in storage came through in excellent condition. We had some trouble with late dug peach that were not taken up until after a severe freeze in November.
Shenandoah, Iowa. E. S. WELCH.

No.
Charles City, Iowa. SHERMAN NURSERY CO.

No.
Topeka, Kans. J. H. SKINNER & CO.

Our storage building is well ventilated and freshened with sulphur and lime every year, and we never have any trouble of any kind.
Winfield, Kans. THE WINFIELD NURSERY CO.

We do not cellar any stock here, therefore had no difficulty.
Cleveland, Tenn. EASTERLY NURSERY CO.

We are building storage houses now, have never used a cellar.
Harrisville, W. Va. R. B. HARRIS.

We do not carry stock in cellar but dig fresh in the spring when wanted.
W. F. ALLEN.
Salisbury, Md.

We do not cellar stock, but dig and heel.
FRANKLIN DAVIS NURSERY CO.
Baltimore, Md.

We do not cellar, but heel in outside.
CHAS. M. PETERS.
Salisbury, Md.

Our stock in cellar came through very nicely.
THE WESTMINSTER NURSERY.
Westminster, Md.

We do not cellar stock, except that we have a building 40 x 48 which we had full of stock left over from fall heeled-in in excelsior, which kept stock in good condition. This did not push as quick as stock dug and heeled-in fresh, or stock left over from fall that was left from fall shipments. All stock left over from fall, even from early shipments, kept in good condition on our heeling grounds.
W. T. HOOD & Co.
Richmond, Va.

Do not have any cellars. All our trees are freshly dug as sent out.
Glen St. Mary, Fla. GLEN ST. MARY NURSERIES CO.

It is not necessary to cellar stock in this locality.
Augusta, Ga. P. J. BERCKMANS CO.

APPLES IN DEMAND IN ALL SECTIONS

3. HAS THE SEASON BEEN CHARACTERIZED BY A STRONG DEMAND FOR SPECIAL LINES AND VARIETIES? KINDLY INDICATE THESE.

Here in New England we have had an exceptionally strong demand for apples, especially Baldwin and Wealthy. All peaches are sold up with some surplus of the lighter grades.
Manchester, Conn. C. R. BURR & Co.



Magnolia Ave.—A drive in the Fruitland Nursery grounds.

Special demand by nurserymen for all lines of our stock.
S. Framingham, Mass. AMERICAN FORESTRY CO.

Fair; general line.
S. Framingham, Mass. W. B. WHITTIER & CO.

We are now in the midst of our spring business and are busy. What the total will be I cannot predict now.
N. Abington, Mass. W. H. WYMAN.

McIntosh Red.
Hyde Park, Vt. F. H. MCFARLAND.

Apples and peaches: Baldwin, Wealthy, McIntosh Red, R. I. Greening, Elberta, Crawford Early, Belle of Georgia, and Smock.
Rochester, N. Y. CHARLTON NURSERY CO.

The demand has been good on all the varieties that I handle.
Callicoon, N. Y. CHAS. G. CURTIS.

A very strong demand for apple trees and small fruits. Apples: Northern Spy, Baldwin, Spitzenburg, R. I. Greening, Wealthy. Small fruits: Marlboro, Eldorado.

A very great general demand—what we should call a lively season.
Geneva, N. Y. W. & T. SMITH CO.

In our lines there was little doing last fall and the first part of the winter. We never had a better demand at fair prices than the latter part of the season. Everything is cleaned up and in many lines there is a shortage..
North Collins, N. Y. WILLETT & WHELOCK.

The season seems to be about normal; there seems to be no extraordinary demand for special lines.
Rutherford, N. J. BOBBINK & ATKINS.

The season has been running very strong on all lines of good stock.
Chestnut Hill, Pa. ANDORRA NURSERIES.

Excellent demand in flowering shrubs and hedge plants.
West Grove, Pa. THE CONARD & JONES CO.

There has been a strong demand for special lines and varieties in apples—Stayman Winesap, Paragon, Jonathan, Star, William's Early Red.
Kennett Square, Pa. THE RAKESTRAW-PYLE CO.

My sales run very heavy on raspberry, blackberry, asparagus, and rhubarb.
Dayton, Ohio. P. D. BERRY.

Apple and ornamental stock.
Beverly, Ohio. W. F. MITCHELL & SON.

Small fruits, our line, all sold out. Special demand for transplanted stock.
New Carlisle, Ohio. W. N. SCARFF.

Our heaviest demands have been in peach and apple, while pear and plum were only fairly active, and as we had no over-supply of cherry, we cleaned up very well. Forest seedlings were almost entirely cleaned up and we had less stock to dump this spring than for many years.
Greenfield, Ind. J. K. HENBY & SON.

There has been a strong demand for all kinds of fruit and ornamentals. There has been a tendency to plant in large quantities and in fewer varieties than heretofore.
Bridgeport, Ind. C. M. HOBBS & SON.

Demand for cherry, apple, peach, and shrubbery has far exceeded our supply. Have only a few high grade peach left, and not a thousand cherry all grades in cellar.
Vincennes, Ind. W. C. REED.

With us the demand for general nursery stock has been good, and the trade has been pretty well balanced up. We have had a very strong demand for apple trees, a fair demand for cherry trees, a strong demand for plum trees, and quite a heavy trade in grape vines.
Shenandoah, Iowa. D. S. LAKE.

There was a good demand for nearly all staple lines with us. In apple trees, a few of the most popular varieties, like Baldwin, Duchess, Northern Spy, and Wealthy, were in especially strong demand, and we were unable to supply all the calls.
Shenandoah, Iowa. E. S. WELCH.

Yes, there has been a big demand for some sorts of apples and transplanted evergreens and plums.
Charles City, Iowa. SHERMAN NURSERY CO.

Demand has been unusually good for all lines.
Winfield, Kans. THE WINFIELD NURSERY CO.

There has been a strong demand for apple, both one and two year, especially for Stayman, York Imperial, Grimes' Golden, and Winesap.
Cleveland, Tenn. EASTERLY NURSERY CO.

Heavy demand for peach and apple in commercial varieties. One year apple in strong demand.
Harrisville, W. Va. R. B. HARRIS.

Our list is small fruits and shrubbery. The demand has been especially strong for Chesapeake strawberry plants; almost three-fourths of our orders include this variety with many large orders for this variety alone.
Salisbury, Md. W. F. ALLEN.

Peach and apple in good demand. Cherry more slow.
Baltimore, Md. FRANKLIN DAVIS NURSERY CO.

Apple and peach. Grape is my specialty. Strong demand for Moore's Early over other seasons. Concord is our leading seller.
Salisbury, Md. CHAS. M. PETERS.

This has been a good season for us, and we had a strong demand for peach trees, principally Elberta and Champion, and in apple, Stayman Winesap, Rome Beauty, York Imperial, Grimes Golden, and Jonathan. We had a good sale on one year trees.
Westminster, Md. THE WESTMINSTER NURSERY.

The past season there was more demand for apple than usual with our trade. Stayman Winesap was called for more than any other variety—but we had heavy demands for Winesap, York Imperial, Mammoth Blacktwig, and Rome Beauty. More demand for red than white apples.
Richmond, Va. W. T. HOOD & CO.

We have had exceptional demand for pomelos.
Glen St. Mary, Fla. GLEN ST. MARY NURSERIES CO.

In fruits the demand has been especially large for pecans, winter varieties of apples, and Elberta, Belle, Hiley and Carman peaches.

Augusta, Ga.

P. J. BERCKMANS CO.

FRUIT TREES ARE SELLING WELL

4. IS THE DEMAND FOR FRUIT TREES HOLDING UP, AND DO YOU THINK IT WILL CONTINUE?

No question in our minds but what there is going to be a strong demand in the future for the fruit stock; for just as good apples can be grown in New England as in the Northwest. All that is wanted is for it to be handled as they handle theirs in that section. We have the soil, and the varieties, and can produce a better quality of apples, and we have plenty of land to plant them on.

Manchester, Conn.

C. R. BURR & CO.

No.

S. Framingham, Mass.

W. B. WHITTIER & CO.

I do not think it up to last year, and it will be less next year. The craze is waning.

N. Abington, Mass.

W. H. WYMAN.

Yes.

Rochester, N. Y.

CHARLTON NURSERY CO.

The demand for fruit trees with me is growing. Orders more than doubled those of last season, and I believe they will continue, for this section, at least.

L. M. EMPIE.

Johnstown, N. Y.

Yes, and we think it will continue so the coming season.

W. & T. SMITH CO.

Geneva, N. Y.

The demand for fruit trees continues good.

BOBBINK & ATKINS.

Rutherford, N. J.

Our demand on fruit trees this year is lighter than usual.

Chestnut Hill, Pa.

ANDORRA NURSERIES.

Cleveland, Tenn.

There has been a strong demand for fruit trees of special kinds, while other kinds have not been called for at all scarcely.

Kennett Square, Pa.

THE RAKESTRAW-PYLE CO.

Unusual demand. Yes, for a few years.

Beverly, Ohio.

W. F. MITCHELL & SON.

We do not see how the demand for fruit trees can be less than now, although there might be some factors that might retard the demand of which we are not aware.

Greenfield, Ind.

J. K. HENBY & SON.

The demand for fruit trees is good and we think it will continue.

Bridgeport, Ind.

C. M. HOBBS & SONS.

Spring trade has been very satisfactory, and will clean up closer than for several years. We have practically no surplus in any line. Look for good demand for fall with shortages in many lines, especially apple, peach, plum, and strong advance in cherry.

Vincennes, Ind.

W. C. REED.

We see no reason for it becoming less. With us it seems to be on the increase.

Vincennes, Ind.

H. M. SIMPSON & SONS.

The demand for fruit trees is holding up in some sections of the country, while in other sections it is not as strong as it has been the past few years. I think it will continue to be reasonably good—although I don't think commercial orchard planting in every locality will be quite as large as it has been the past few years.

Shenandoah, Iowa.

D. S. LAKE.

The demand for fruit trees is good with us, and we do not see any reason why it should not continue. There will be a lessening of demand for apple for commercial planting in many sections, where they get pretty well supplied, and possibly there will be seasons soon, when the demand for apple trees for commercial planting will be less than it has been for several years now. We must expect this.

Shenandoah, Iowa.

E. S. WELCH.

No.

Charles City, Iowa.

SHERMAN NURSERY CO.

Yes, for another season, at least.

Topeka, Kans.

J. H. SKINNER & CO.



The Berckmans Nursery fronting on Washington Road

The future outlook and demand for fruit trees could be maintained by encouraging only such planting as would give value received, and furnishing good stock. Otherwise, there will no doubt in time be a reaction.

THE WINFIELD NURS. CO.

Winfield, Kans.

The demand is good for first-class stock, and we believe it will continue. The outlook is good for the nurserymen who produce first-class goods.

EASTERLY NURSERY CO.

We have no cause to complain, as we sold everything we had to offer.

Harrisville, W. Va.

R. B. HARRIS.

The demand for small fruit plants seems to be equal to that of any previous year.

Salisbury, Md.

W. F. ALLEN.

For a time at least, but we are afraid that the plantings will be too large and an overproduction will follow.

Baltimore, Md.

FRANKLIN DAVIS NURSERY CO.

Yes, and everything here indicates an increase.

Salisbury, Md.

CHAS. M. PETERS.

The demand for fruit trees is holding up well, especially on apple and peach trees, and we think it will continue.

Westminster, Md.

THE WESTMINSTER NURSERY.

We think there will be the usual sales made this season, as we have a considerable increase over last season through agents, but have made it by increasing our force.

Richmond, Va.

W. T. HOOD & CO.

Yes, it is holding up and increasing. We believe it will continue to do so for some time to come.

Glen St. Mary, Fla. GLEN ST. MARY NURSERIES CO.

We can see no falling off in the demand for fruit trees.

Augusta, Ga. P. J. BERCKMANS CO.

IMPROVEMENT OF THE HOME GROUNDS WITH ORNAMENTALS BECOMING MORE COMMON

5. DOES THE EXPERIENCE OF THE PAST TWO OR THREE YEARS INDICATE AN INCREASED AND CONTINUING INTEREST IN ORNAMENTALS AND LANDSCAPE GARDENING? WHAT IS THE OUTLOOK?

Ornamentals. There is a good demand, and more so each year on the landscape planting, and we believe it is here to stay. The new dwelling is not complete without landscape gardening, and this calls for large demands for shrubs and hedges like *Berberis Thunbergii* and California privet.

Manchester, Conn. C. R. BURR & CO.

Yes. I believe ornamental planting is increasing and especially in the Middle West.

S. Framingham, Mass. AMERICAN FORESTRY CO.

A continued interest—good.

S. Framingham, Mass. W. B. WHITTIER & CO.

Good. A growing interest.

N. Abington, Mass. W. H. WYMAN.

Yes, outlook is bright.

Rochester, N. Y. CHARLTON NURSERY CO.

On the increase—better every year.

Callicoon, N. Y. CHAS. G. CURTIS.

Sales are increasing on ornamentals, but I do not think sales are increasing more than they are on fruit trees. The outlook is about the same as it has been.

Johnstown, N. Y. L. M. EMPIE.

Increased—good.

Geneva, N. Y. W. & T. SMITH CO.

We are ever optimistic for the future.

Rutherford, N. J. BOBBINK & ATKINS.

The interest in ornamentals is considerably on the increase, and better grades at better prices are in demand.

Chestnut Hill, Pa. ANDORRA NURSERIES.

Yes, the outlook is good.

West Grove, Pa. THE CONARD & JONES CO.

There has been an increased and continuing interest in ornamentals and landscape gardening within the past few years, and it looks as though there would continue to be a large amount of ornamental stock needed. People are paying very much more attention to this line than a few years ago.

Kennett Square, Pa. THE RAKESTRAW-PYLE CO.

The demand has been heavy on ornamental stock, with every indication of continued interest in decorative planting.

Dayton, Ohio. J. W. McNARY.

A large portion of our output goes to nurserymen for lining out, and the demand appears to be on the increase

each year, so that we have been obliged to substantially increase our facilities. We are now endeavoring to plan further enlargements.

Springfield, O.

THE LEEDLE FLORAL CO.

Yes. Unusually good. Farmers are just commencing to improve homes, and have plenty of money to buy.

Beverly, Ohio.

W. F. MITCHELL & SON.

Yes. The outlook is good.

New Carlisle, Ohio.

W. N. SCARFF.

There is a decided increase in planting of the ornamental, and in landscape gardening. The outlook in this line is good.

Bridgeport, Ind.

C. M. HOBBS & SONS.

Demand for ornamentals has been much stronger than usual and seems to be on the increase, as people are just waking up to the fact that it pays to beautify the home.

Vincennes, Ind.

W. C. REED.

There has been with us an unusual demand for ornamentals, and if the business of our cities continues to be prosperous, and they continue to grow, I am satisfied that the demand for ornamental stock will materially increase.

Shenandoah, Iowa.

D. S. LAKE.

With us there is a decided increase in the demand for ornamental stock of all kinds, and an increased demand for ornamentals suitable for landscape work. My judgment is that this demand will increase more rapidly in the future.

Shenandoah, Iowa.

E. S. WELCH.

Good.

Charles City, Iowa.

SHERMAN NURSERY CO.

An increasing demand for ornamentals in this section.

Topeka, Kans.

J. H. SKINNER & CO.

Yes, as a country home becomes older, people become more interested in the beautiful, and ornamentals and landscape gardening is being more appreciated.

Winfield, Kans.

THE WINFIELD NURSERY CO.

Yes.

Judsonia, Ark.

J. A. BAUER.

The past few years have shown an increased interest in ornamentals and landscape gardening, and a steady increased demand for this class of stock. The outlook is very promising along these lines.

Cleveland, Tenn.

EASTERLY NURSERY CO.

From our experience, the interest in ornamentals and landscape gardening is on the increase.

Salisbury, Md.

W. F. ALLEN.

Yes, the outlook is good. Ornamentals will be in demand for some time to come.

Baltimore, Md.

FRANKLIN DAVIS NURSERY CO.

Yes, and prospects for future very bright.

Salisbury, Md.

CHAS. M. PETERS.

Our past two or three years' experience has indicated an increased demand for ornamental stock, and the outlook is good.

Westminster, Md.

THE WESTMINSTER NURSERY.

We think there will be an increase in ornamentals in suburban towns, but we do not sell much to farmers through agents.

Richmond, Va.

W. T. HOOD & CO.

Yes, the demand for ornamentals is constantly on the increase. The outlook in this direction is good.

Glen St. Mary, Fla. GLEN ST. MARY NURSERIES CO.

There is a decided increase in the demand for ornamentals. We have executed many large landscape contracts throughout the South, and the desire for beautifying private estates, the building of parks, and civic improvements, is rapidly being manifested. This tendency for beautifying our cities and homes is indeed most gratifying. It indicates that the condition of the country and the people is improving.

Augusta, Ga.

P. J. BERCKMANS CO.

INCREASED EXPENSES WARRANT HIGHER PRICES

6. SHOULD THERE NOT BE A GENERAL ADVANCE IN THE PRICE OF NURSERY STOCK?

The trade demands your very best graded stock. In order to produce it, it means a whole lot more labor, careful handling, and other things, making the cost a great deal higher than it was ten years ago.

C. R. BURR & CO.
Manchester, Conn.

There should be an honest tariff protection. The "brokers" of European nursery stock are entirely responsible for the impossibly low prices. The American growers should hold the officials of the United States Agricultural Department responsible for this.

AMERICAN FORESTRY
Co.
S. Framingham, Mass.

No.
S. Framingham, Mass.

W. B. WHITTIER & CO.

No—only to meet increased labor expenses.
N. Abington, Mass.

W. H. WYMAN.

Yes.
Hyde Park, Vt.

F. H. MCFARLAND.

Yes.
Rochester, N. Y.

CHARLTON NURSERY CO.

Yes.
Callicoon, N. Y.

CHAS. G. CURTIS.

I believe that there should be an advancement of price on the retail stock, and that the nurserymen should not sell to the planters at wholesale prices. There should be a wholesale and a retail price, and the wholesale list sent only to those that are entitled to the same. The price on plums and cherries is too low at wholesale, and should be advanced.

Johnstown, N. Y.

L. M. EMPIE.

Decidedly yes on ornamentals. Apples are too high in proportion to other fruits.

Geneva, N. Y.

W. & T. SMITH CO.

Yes, with the increased cost of living, we should pay better wages, and to do so must naturally get more for the stock.

North Collins, N. Y.

WILLETT & WHEELLOCK.

Much of the stock sold to the retail purchaser is done so at ridiculously low prices. We turned down prospective orders amounting to thousands of dollars on account of the low figures desired. Other nurserymen, no doubt, are taking them up, instead of holding out for prices.

Rutherford, N. J.

BOBBINK & ATKINS.

In many lines there should be a decided advance. I think all will agree that many items are being handled with far too low a figure.

Chestnut Hill, Pa.

ANDORRA NURSERIES.

We believe good stock will stand it without decrease in bulk of business.

THE CONARD & JONES
Co.

West Grove, Pa.

There are some kinds of stock that seem too low, and there are other kinds that seem satisfactory as to price. The prices are probably adjusted by the amount on hand. The immense planting of apples would indicate a reduction in the price of these pretty soon.

THE RAKESTRAW-
PYLE CO.

Kennett Square, Pa.

Yes.

P. D. BERRY.
Dayton, Ohio.

Yes.
Beverly, Ohio.

W. F. MITCHELL & SON.

Yes, certainly; twenty-five per cent, at least.
New Carlisle, Ohio.

W. N. SCARFF.

The increased value of land, the increased cost of supplying the needed fertility, the increased cost of labor, the demand for the increased energy among all nurserymen to supply a better grade of stock, make a better price a necessity if the quality is to be maintained.

Greenfield, Ind.

J. K. HENBY & SON.

There should be an increase in the prices of nursery stock. The prices of the articles which nurserymen use and must purchase continue to advance. The prices of nursery stock must also advance.

Bridgeport, Ind.

C. M. HOBBS & SONS.

Think there should be considerable advance in some lines, as to prices, especially after the drouth last summer and



Kelly Bros'. Storage House, Dansville, N. Y.

losses this winter, which will cause many lines of stock to be short of supply.

Vincennes, Ind.

W. C. REED.

The wholesale price on most lines is too low. In view of the increased cost of labor and everything in the way of supplies which go to make up the cost of production, it should materially advance.

Vincennes, Ind.

H. M. SIMPSON & SONS.

I am inclined to think that some kinds of nursery stock are plenty high at the present time—while other items are too low; but no doubt prices will adjust themselves. When there is a surplus in a certain line, prices are bound to go down; and when there is a scarcity, they will go up.

Shenandoah, Iowa.

D. S. LAKE.

This is something that will be largely controlled by the supply and demand. Usually, when there is a sufficient demand for a variety or line of stock, a profitable price can be secured. There is no doubt but what a good many varieties of stock are being sold too low, and that the cost of producing good stock increases each year; and oftentimes the prices do not advance in proportion to the increased cost.

Shenandoah, Iowa.

E. S. WELCH.

There should be, but nurserymen do not seem to hang together.

Charles City, Iowa.

SHERMAN NURSERY CO.

Yes.

Topeka, Kans.

J. H. SKINNER & CO.

There will have to be a general advance in the price of nursery stock if progress keeps apace in that line with other lines of business, and if the planters are furnished with the quality that they are willing to pay for and anxious to receive.

Winfield Kans.

THE WINFIELD NURSERY CO.

Yes, we think there should be a general advance in prices of stock, especially of apple and cherries. Apples have been rather high, but with the strict grading that is required now, the prices should be much higher to fully compensate the grower.

Cleveland, Tenn.

EASTERLY NURSERY CO.

Prices should correspond with those of products, and I believe stock in some lines is selling for less than it should.

Harrisville, W. Va.

R. B. HARRIS.

I think in many lines there should be an advance in nursery prices, as there is quite a percentage of growers of small fruit plants, as well as other lines of nursery stock, that are trying to sell it below the cost to produce and properly pack first-class stock.

Salisbury, Md.

W. F. ALLEN.

Prices on some lines are good, and on others too low. Prices should be kept up.

Baltimore, Md.

FRANKLIN DAVIS NURSERY CO.

I think it will bear but slight advance, if any.

Salisbury, Md.

CHAS. M. PETERS.

We feel that there should be a general advance in prices for good nursery stock, especially cherry and pear trees.

Westminster, Md.

THE WESTMINSTER NURSERY.

We think there should be a general advance in the prices

of nursery stock, but don't think we will get it as long as the wholesalers try to sell to dealers all they can, and then flood the country with cheap price lists or very little in advance of what they sell to nurserymen or dealers for.

Richmond, Va.

W. T. HOOD & CO.

We believe there should be.

Glen St. Mary, Fla.

GLEN ST. MARY NURSERIES CO.

The increased cost of labor and material, in fact, an increase all along the line, must necessarily cause an advance in the price of nursery stock. Many growers are selling many items of nursery stock below the cost of production.

Augusta, Ga.

P. J. BERCKMANS CO.

DO NOT REPLACE, GENERALLY SPEAKING

7. WHAT ARE YOUR VIEWS ON THE REPLACEMENT QUESTION?

We have gone over this a number of times, and we come to the conclusion that while it should not be, we feel sometimes it is our fault, and stock should be replaced; but when you get down to make an exception and not carry out your replacements, you get into trouble. So our contracts read that if your salesmen find the customers' stock is not living, they shall replace it, although we find it should not generally be done.

Manchester, Conn.

C. R. BURR & CO.

Replace only when the nurseryman is responsible.

S. Framingham, Mass.

AMERICAN FORESTRY CO.

Very pronounced against it.

S. Framingham, Mass.

W. B. WHITTIER & CO.

Guarantee stock alive and healthy when it goes from the nursery—beyond that nothing.

N. Abington, Mass.

W. H. WYMAN.

Have never been called upon to replace. Think there might be a better way to handle this matter.

Hyde Park, Vt.

F. H. MCFARLAND.

That it should be cut out entirely.

Rochester, N. Y.

CHARLTON NURSERY CO.

If it is the fault of the shipper, stock should be replaced, if the shipper is notified in due time.

Callicoon, N. Y.

CHAS. G. CURTIS.

Nurserymen should put out good first-class stock that has had proper care, and positively refuse to replace stock that fails to grow for certain reasons over which they have no control.

I have always replaced stock, but will give one instance. One of my agents sold a dozen fruit trees and when stock was delivered, the party was sick; and he told me himself that the trees lay in an out-shed for over a week, with nothing but an old sack over them. And when the trees were planted the bark was all shriveled up. Was this the nurseryman's fault? Of course they all died.

Johnstown, N. Y.

L. M. EMPIE.

Unnecessary; but we are wholesalers and not affected.

Geneva, N. Y.

W. & T. SMITH CO.

We believe that nine out of ten times it is the fault of the planter that he loses any stock. Here at the nursery we plow in hundreds of small plants, many with barely a trace of roots, and in a hurry, so that often we feel we are not giving them a fair chance. Yet the loss is hardly noticeable. So

why should buyers lose plants handled under exactly the same condition, so far as care is concerned, up to planting? They lose them because of neglect, either before planting (which we believe is generally the case) or after planting. They should stand their own losses; then they would be more careful.

North Collins, N. Y.

WILLETT & WHEELOCK.

We do not think that any replacements should be made in evergreens. Our feeling in regard to deciduous stock is that if this fails to grow the party receives nothing for his money, and it should be replaced. If it dies after growing, no replacements should be made.

Rutherford, N. J.

BOBBINK & ATKINS.

Positively no replacements.

Chestnut Hill, Pa.

ANDORRA NURSERIES.

We endeavor to see our customers well started in growing everything we send them.

West Grove, Pa.

THE CONARD & JONES CO.

We think the custom of replacing stock is uncalled for. It is a great bother to the nurseryman and there is no reason why it should be done. It is reasonable to expect that a little stock would fail to live in each planting, and nurserymen should not be expected to replace anything unless it is conclusively shown that they were at fault.

Kennett Square, Pa.

THE RAKESTRAW-PYLE CO.

When stock is delivered in good growing condition, I think the shipper's responsibility should cease.

Dayton, Ohio.

P. D. BERRY.

No more reason to replace trees than seeds or animals. Not reasonable at all.

Beverly, Ohio.

W. F. MITCHELL & SONS.

In some cases it should be done—but we never agree to do it at time of sale.

New Carlisle, Ohio.

W. N. SCARFF.

Anyone qualified to plant and care for stock should be able to judge whether or not the stock is good and vigorous upon receipt thereof, and if there is any complaint to be made, it should be made upon receipt of the stock, or the purchaser should hold his peace thereafter forevermore.

Greenfield, Ind.

J. K. HENBY & SON.

We have practically discontinued the practice of replacing nursery stock. We believe we can make as many sales without replacing as we can by replacing.

Bridgeport, Ind.

C. M. HOBBS & SONS.

We have quit replacing stock, but do very little retail business.

Vincennes, Ind.

W. C. REED.

We are not in favor of replacement.

Vincennes, Ind.

H. M. SIMPSON & SONS.

I think the replacement of stock that dies is absolutely wrong, and should never be done. If nurserymen send from their grounds absolutely sound stock and in good condition, that ought to end their responsibility; and when it arrives at destination and is accepted as all right, there should never be any question about replacing.

Shenandoah, Iowa,

D. S. LAKE.

We have cut it out.

Charles City, Iowa.

SHERMAN NURSERY CO.

Deliver good stock once—let that end it.

Topeka, Kans.

J. H. SKINNER & CO.

Regarding replacement, we do not do any of it under any terms. We simply guarantee a man value received when he buys his stuff, and if, by mistake, he should receive any goods that are not as guaranteed, we would make the entire amount good immediately.

Winfield, Kans.

THE WINFIELD NURSERY CO.

I guarantee safe arrival, and after that all stock is at purchaser's risk. I don't think it is a fair deal for nurserymen to replace part that may die through carelessness of planter.

Judsonia, Ark.

J. A. BAUER.

The practice of replacing stock should, in our opinion, be absolutely abolished, unless it should be in cases where the nurserymen fail to get their stock out in good condition.

Cleveland, Tenn.

EASTERLY NURSERY CO.

It is a nuisance. The planter should be educated to understand that what he is buying is of value, and not to be neglected. He should not be coaxed into buying with the promise that, if his purchase is a failure, the nurseryman will refund his money or replace the stock.

Harrisville, W. Va.

R. B. HARRIS.

I do not believe in replacing nursery stock that is delivered to the purchaser in good condition. The prices charged should cover first class stock delivered to the purchaser in first class condition, and then it seems to me it is up to the purchaser to take care of it.

Salisbury, Md.

W. F. ALLEN.

Nurserymen should not replace stock unless it is sold at fifty per cent advance of retail prices.

Baltimore, Md.

FRANKLIN DAVIS NURSERY CO.

I think it a big mistake, and the practice is doing the general trade more harm than good. I never have guaranteed to replace when making sales, but have made good some losses where I thought it necessary.

Salisbury, Md.

CHAS. M. PETERS.

We are in favor of discontinuing the replacement of nursery stock, and hope all the nurserymen of the United States will come to this conclusion and adopt a system of no replacing.

Westminster, Md.

THE WESTMINSTER NURSERY.

Do not think nurserymen should sell on condition that stock should be replaced free or half price, unless it should be our fault, due to delay on roads or late shipments.

Richmond, Va.

W. T. HOOD & CO.

We believe trees should not be replaced unless for some unusual reason. If replaced at all, it should be on the basis of purchaser paying half price for trees replaced.

Glen St. Mary, Fla.

GLEN ST. MARY NURSERIES CO.

The replacement of nursery stock which failed to grow should not be tolerated. We do not replace any stock, except when the error is on our part, and this is mighty seldom. In ninety-nine out of a hundred cases the loss of trees, plants, shrubs, etc., is due to the planter. The trees are exposed to the freezing weather, improperly planted, not pruned, fertilized, or cared for after being planted. The planter invariably places the blame on the shoulders of the nurseryman and expects him to make good the loss free of cost.

A demand for replacement was made upon us today. During the winter we delivered a large quantity of shrubs and evergreens to one of our clients. The man who was doing the planting of these shrubs and plants left them exposed to the weather over night. The next morning we saw this lot of plants with their roots covered with icicles, and our client expected us to replace them. We told him the trouble and he made no further demands upon us.

The only guarantee any nurseryman should give is that the stock is first-class in every respect, perfectly healthy, true to name, and packed in the best possible manner. After delivery to consignee or transportation company, the nurseryman's liability ceases. The nurserymen generally are so good-hearted and gullible that the purchasing public seem to think they are "easy." Let the nurseryman fill the order with strictly first-class goods, pack in the best possible manner, and let the consignee's instructions be carried out fully. Never substitute unless so authorized, and then let the substitute be as good or better than the varieties which the nurseryman was unable to supply, then if the stock dies let the consignee bear his part of the burden.

Augusta, Ga.

P. J. BERCKMANS CO.

8. GENERAL OBSERVATIONS.

The outlook for next season should be good. Of course, the climatic conditions make a great deal of difference with the amount of sales. If the farmers get good crops, we get the sales; and if the factories are running in good shape, we get a good city trade.

Manchester, Conn.

C. R. BURR & CO.

We have had the largest year's business in our history, and the outlook is very bright for it to continue.

Rochester, N. Y.

CHARLTON NURSERY CO.

If the nurserymen will have the trees fit the labels and grade their stock right, they will be able to do business at a fair profit.

Johnstown, N. Y.

L. M. EMPIE.

Season opened late, but weather continues cool and we are getting on nicely with filling orders.

Geneva, N. Y.

W. & T. SMITH CO.

We are always in hopes that all the nurserymen will join in one big enterprise, and that we will then have one price for each grade of stock. When this happens, every nurseryman in the entire country will begin to make money, which many of them are not doing at this time.

Rutherford, N. J.

BOBBINK & ATKINS.

Entirely too busy at this time to go further into the matter. We are having a hustling season.

Chestnut Hill, Pa.

ANDORRA NURSERIES.

April sales promise to make up for contracting conditions for the first three months of this year.

West Grove, Pa.

THE CONARD & JONES CO.

This has been the worst season for getting stock out I have ever experienced.

Dayton, Ohio.

P. D. BERRY.

Nursery business has good outlook, but prices should be a little better on some sorts of trees.

Beverly, Ohio.

W. F. MITCHELL & SON.

The winter has been a hard one in this section, much stock suffering from the hard freezing. Abnormal conditions in the fall put stock in bad condition to withstand a severe winter.

Dayton, Ohio.

J. W. McNARY.

The outlook in general is good, but on account of the drought of last summer and the severe winter, it appears as though there would be a shortage of some of the leading varieties this fall.

Bridgeport, Ind.

C. M. HOBBS & SONS.

Demand seems to be increasing very fast for one year apple, owing to the short supply, and think it will continue. Also demand for budded apple is on the increase.

Vincennes, Ind.

W. C. REED.

Spring very late and wet here, and the work is much behind the usual year. Spring delivery was fairly good, and we are practically cleaned up on everything.

Vincennes, Ind.

H. M. SIMPSON & SONS.

As far as I can see, the outlook in general for the nursery business is quite promising. It will always fluctuate somewhat, being less in some localities and more in others, but I do not see why a well balanced stock should not find a good market in the future.

Shenandoah, Iowa.

D. S. LAKE.

Conditions have been favorable for spring planting, and on the whole were favorable for spring trade, although the season was late and a great deal of work had to be crowded into a shorter period than usual. The weather remaining cool and favorable for handling stock was greatly to the benefit of the nurserymen and their customers. I think good stands generally should be secured on stock that has been planted.

The outlook is very encouraging for the fruit crops, and all other farm crops. The outlook for the ensuing year's business is decidedly good, in my judgment. If we do not have many late freezes yet to destroy a portion of the fruit crops in many sections and discourage planting. It seems to me nurserymen have an exceptionally good year ahead of them.

Shenandoah, Iowa.

E. S. WELCH.

We believe that the day has come when horticulture and nursery business should be distinguished from mere tree growing, and that there are wonderful opportunities for high class trees, providing that kind of stock is furnished.

Winfield, Kans.

THE WINFIELD NURSERY CO.

I grow only strawberry plants. I have had a very heavy business, in fact it has been about one-third over any other year's business. Season in this section is about thirty days later than in the past.

Judsonia, Ark.

J. A. BAUER.

The general outlook for the nurserymen of the South is encouraging. We had a rather late planting season, but we have had more than enough rain, which has started all transplanted stock nicely. We have a large fruit crop set at present, and we believe it will encourage a larger planting next fall in the South than has been made for several years.

Cleveland, Tenn.

EASTERLY NURSERY CO.

I see no reason or any condition now existing that indicates anything but a good or bright year for sale of general line of nursery stock. Everything is very favorable here for planting stock. Buds look good—none winter-killed.

Salisbury, Md.

CHAS. M. PETERS.

We would like to see lower express rates on nursery stock, and the shipments of nursery stock by freight given more

prompt attention by the railroad companies in transit. We have had considerable trouble the past season in getting shipments of nursery stock to our customers in anything like a reasonable length of time.

Westminster, Md. THE WESTMINSTER NURSERY.

All nursery stock of planting 1910 and 1911 is doing well—and while we were late with our spring planting, think stock looks as if we will not have much loss, as it is starting well. We have about our usual planting, except that we increased on apple planting.

Richmond, Va.

W. T. Hood & Co.

Under the head of "General Observations," one of the many serious problems which confronts the nurseryman is the demand of landscape architects that the nurserymen sell and bill to their clients at their wholesale rates. This is entirely wrong, and although the National Nurseryman's Association passed a resolution that the clients of landscape architects would not receive wholesale rates, this resolution has not been followed up by all of the nurserymen.

Again, cemeteries, parks, and municipalities should not receive the same wholesale quotations as are given to the nurseryman. The trade should be protected.

Augusta, Ga.

P. J. BERCKMANS CO.

A MODERN NURSERY OFFICE

By H. Harold Hume

In planning a building for the office force of a nursery business, the essential points to be kept in mind are that the building should be large enough for present and future needs and that the several divisions of this force, order department, shipping department, accounting department, etc., should be placed in convenient working relation to one another. The space set aside for each of the departments must not be too great, as this will impair their working efficiency. But on the other hand, where the men are so crowded at their work that their movements interfere with or interrupt one another, it goes without saying that their work cannot be handled with such dispatch as when they are given sufficient space to work without getting in the way of one another. Combined with a comfortable and convenient internal arrangement, there should, of course, be a fitting architectural exterior.

These were the points held in view when the new office building of the Glen Saint Mary Nurseries Company was erected. The details of the building were carefully worked out well in advance by the architect, Mr. J. H. W. Hawkins of Jacksonville, Florida.

The walls are selected, hard burned, common brick laid in colored cement mortar, the joints wide and raked back, giving a rustic finish. The trimmings are gray cement stone and the hip roof is covered with gray Century asbestos shingles. The most noticeable thing about the roof is the overhang of four feet, which permits the lowering of the

windows from the top even during very stormy or rainy weather.



Front View, Glen Saint Mary Nurseries' Office.



Administrative Office from Southeast.

The central part of the building is two stories and the side wings one story. If at any time it should become necessary to secure more space, this can be done by extending the wings. It is not likely that the central or administrative portion of the building will ever need to be enlarged.

Over all, the building measures 86' 6" east and west. The central or two story portion is 35' 6" x 38' and the wings are each 25' 6" x 22' 6". The two story section is fronted on the south by a porch 53' 6" x 9', there being three entrances from this porch, one into each wing and the front or main doors. At the rear is a smaller porch for unloading stationery, catalogues and other office supplies.

Entering the front door, the president's office is seen on the right, the secretary's office on the left, each 12 x 16' 2". These two offices occupy the space in front of the hall which connects the two wings. Back of this hall is the store room for office supplies (13' 2" x 15' 9"), the lavatory (6' 6" x 13' 2"), and the vault (7' 8" x 10' 9"). The entrance to the vault is into the general

business office which occupies the whole of the west wing (20 x 24 ft.). The east wing (20 x 24 ft.) is the stenographers' room, and there the current correspondence files are kept.

The second story of the central part of the building is reached by a broad stairway from the lower halls. On the

west side of the upper hall is the store room for back correspondence files and the mailing room. All the mailing lists are handled with an addressograph machine. Across the hall on the east side is the visitors' room, 12' 4" x 22' 8", and at the rear the photographic room, dark room and negative room, 17' 8" x 21'. The photographic equipment is complete in every detail; for the company believes in the liberal use of photographs taken on their own grounds. The room in which exposures are made is lighted by two windows east and north, each 6 x 9 feet.

The interior is finished with buff ceilings and dark green walls, the woodwork being stained dark and varnished. The building is heated with hot air and is wired and piped for electricity and gas.

All the down stairs offices are inter-connected and the business office is connected with the packing house by speaking tubes. For communication with the outside world, the office is connected by long distance with Jacksonville, Florida, thirty miles away, and in the general business office there is a telegraph equipment, so that messages are sent and received direct over the Western Union telegraph lines.

Considered in every detail, this nursery office is one of the most, if not the most complete and convenient in the country.

ANNOUNCEMENT OF AMERICAN PEONY SOCIETY

The annual meeting and exhibition of the American Peony Society will be held this year at Cornell University, Ithaca, N. Y. The date of the meeting has not yet been decided upon, but it will be about June 20.

The Society has for some years past been carrying out a very important piece of work on the nomenclature of the peony. Peony growers do not need to be reminded that the names of many of even the commonest varieties have for a long time been under suspicion; that a variety ordered under the same name from half a dozen different growers may bring as many different sorts, or even that the same variety ordered from the same dealer in successive years will not always prove identical. There are many reasons which have combined to produce this confusion in the nomenclature. One of the most potent was that there did not anywhere exist a standard collection of varieties by means of which unnamed or mis-named sorts could be identified; there has not even been any authoritative descriptive list which would answer the purpose.

The American Peony Society decided some years ago to meet this situation by establishing a standard collection of varieties, and by publishing a descriptive check-list. The authorities at Cornell University generously offered to take care of the collection and on an appeal from the Society to growers in all parts of the world, about two thousand named sorts were received and planted. These have now been under observation by the Nomenclature Committee of the Society and by experts at Cornell for the past four or five years, and in addition the Committee has worked over most of the larger collections in the eastern part of the country.

The results of these studies have been published from time to time in separate bulletins, which offer to the nurseryman and amateur authoritative descriptions of the named sorts, so far as treated. Up to the present time about ninety-five per cent. of all the important commercial varieties have been described and many others of less importance; about a thousand varieties in all have come under the attention of the

Committee. A great deal of confusion has been removed, and countless synonyms discovered.

The work is now nearly complete. After the present season's work is done, it is hoped that it will be possible to publish a final and complete check-list giving full descriptions of practically all the varieties that are in commerce at the present time. This list will be put out in book form, and will constitute the only authoritative work of its kind in existence. It will be offered for sale to the public.

With the completion of this work the collection at Cornell will be rearranged. It now occupies a large space, the care of which entails a good deal of labor. A representative collection is to be permanently planted at Cornell, and the rest of the stock will be disposed of.

The meeting at Ithaca this year will give the members of the Society and all interested in the peony their last chance to visit the full, original collection; and as the plants are now of six or seven years' growth, the field offers an extraordinary opportunity of study for the specialist.

For the nurseryman and the amateur not yet awake to the wonderful developments that have been made in peony blooms during the past twenty-five years, the exhibition of the Society and the Cornell plot itself will be a revelation.

The following letter has been sent out to all the members of the Society:

To the Members of the American Peony Society:

At the last meeting of the Society held in Philadelphia it was decided to hold this year's meeting at Cornell University, the exhibition at this meeting to be composed largely of blooms from the plants

that have been placed in a permanent plot as representative of the identified varieties which have been described in the various bulletins issued. This exhibition and meeting at Cornell have been arranged with the view of giving all the members of the Society an opportunity of seeing the actual results that have been obtained, and of comparing the identified varieties at Cornell with their own varieties which they are growing under the same names.

As this will be the most important business meeting the Society has ever held inasmuch as various important questions will come up, it would be to the interest of every member as well as to the Society to have as large an attendance as possible.

Among the most important questions to be decided are:

1. The method of bringing the first part of this work to a close and the disposal of the plants remaining in the original plot;
2. The future course and policy of the Society to be pursued on the completion of the Cornell work;
3. The publication by the Society of the complete official catalogue or peony manual, which shall be a revision and correction and condensation of the present manuals, this book to be published exclusively by and to be the property of the Society with the view of making it a standard work on the peony, which can be placed on sale to the general public, the proceeds of which shall go to the Society.

At the last meeting of the Society held in Philadelphia, it was decided that the plants remaining in the original plot could be put to no better use than to be sold to some private estate and the proceeds of the sale used towards the expense of publishing this book, and a letter has been sent to all those firms who contributed to this experimental work asking their consent to do this.

As it is the desire to make the principal part of the exhibition from the Cornell plot, it has been deemed best to forego for this year the usual premium list and to offer in its place the following:

For the best collection of not less than 100 varieties, a prize of \$50 and a second prize of \$25. This will be open to commercial growers only.

(Continued on page 219)



Photographic Room and Steengraphers' Room, Glen Saint Mary.

THE ARNOLD ARBORETUM

Founded less than a half century ago, with a fund left by Mr. James Arnold for the advancement of agriculture or horticulture, the Arnold Arboretum has already come to possess a collection of trees and shrubs superior to anything else of the kind in the world. With its two hundred twenty acres of meadow, hill, and valley, it offers that variety of conditions which will allow a great diversity of horticultural species to find congenial surroundings. In choosing the most advantageous location for each specimen planted, it has been the aim not to interfere with the



Japanese Azaleas on Azalea Path.



Hemlock Hill—Arnold Arboretum.

beauty of the place, as arranged by the hand of Nature. It is intended eventually to have in the Arboretum all kinds of trees and shrubs that will endure the climate. In carrying out this plan, many explorations in foreign countries have been made and will continue to be made, for the purpose of obtaining trees not previously included in such collections. Many of these may be seen growing in the nursery and propagating department of the Arboretum. One may gain some conception of the number of different kinds of trees that are hardy in that region by passing along the driveways; for a representative of each genus growing in the Arboretum stands near a drive.

The shrub collection in beds ten feet wide with a total length of 7765 feet contains only well known, hardy shrubs, and only those genera in which all the species are shrubs. Shrubs that are somewhat tender or are imperfectly known are planted in other sections of the Arboretum. All through the season, shrubs may be seen flowering with the profusion shown in the azalea picture.

Even aside from a consideration of the beauties of the place, an excursion through the Arnold Arboretum will surely be a trip of great interest to nurserymen, as showing a large number of trees and shrubs which are practically unknown as yet in this country, and which, proving desirable in eastern Massachusetts, will also be valuable in many other parts of the United States.

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STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.;
secretary, Thomas B. Meehan, Dreshertown, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, Charles J. Brown,
Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in
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Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma;
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Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-
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Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary,
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Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secre-
tary-treasurer, John S. Kerr, Sherman, Texas.
Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.;
secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second
Wednesday in December.

ON TO BOSTON!

Straighten up your desk, brother, hide
your bills, bank your credits, burn
your surplus stock (not bills receivable),
pack your grips and hie ye to Boston
town. Come back to the land of your forefathers—except
those who are one generation removed from Ireland, Scotland,
Deutschland or some other foreign clime. Come back east
and get a whiff of colonial history. Browse around Boston
common, explore old South church and its cemetery. Dis-
cover that cradle of liberty, Faneuil Hall. "Mosey" round
the produce market, the fish stalls and gaze across the
historic harbor. If you have time (after the meeting) take
a run through the suburbs. See Salem where you'll find
that ardent advocate of native plants, Harlan P. Kelsey,
besides many other interesting features. It was in Salem
or perhaps Dedham the great American canker worm was
discovered nearly three centuries ago. Remember, that
Concord in the old Bay State produced the grape of that
name. Remember, that the township of Rumford not
far from Boston produced that great standard apple of the
east, the Baldwin. Remember, that the great work of
E. S. Rogers in improving the native grape was carried on in
a humble garden in Salem. These are a few of the things
one can keep under his hat while enjoying the pleasures,
intellectual and otherwise, provided by the entertainment
committee. The westerner who has not visited Boston has
something coming, now is the opportunity to realize his due.

FEDERAL INSPECTION BILL

The most important committee report
to be presented at the Boston meeting
will be by chairman Wm. Pitkin of the
Legislative committee in reference to
the year's work on the Federal inspection
bill. This work will show an enormous amount of work done
by the eastern and western representatives on this im-
portant committee. It will show that in the west, ex-
president W. P. Stark aided by Professor S. J. Hunter, have
performed yeoman's service, while in the east, chairman
Pitkin, Irving Rouse, Thos. B. Meehan, W. H. Wyman,
J. McHutchison and others have given freely of their time
and energy. In our recent references to this bill we have
coupled with it only the name of Chairman Pitkin as the
responsible officer in charge but we are sure that the rank
and file of the association are fully aware of the generous
help rendered by those in addition to the chairman men-
tioned above. This aspect of the matter is set forth in
Professor Hunter's admirable statement in the March issue
of the NATIONAL NURSERYMAN. At the present writing the
bill is quiescent in the hands of one of the House committees.

BRING EXHIBITS

This is to remind our members, perhaps
unnecessarily, that Mr. A. E. Robinson of
Bedford, Mass., is chairman of the com-
mittee on exhibits. It is also to remind
those from the west and the south that they must not de-
pend exclusively upon the eastern contingent to furnish
the exhibit hall. The exhibit room has two functions: it is
educational, it is commercial. New plants, interesting
developments illustrating strange possibilities bear upon the

educational, while the display of well grown stock, or labor saving machinery stimulates the commercial aspects of the meeting. Along educational lines we would like to see a collection of nursery stock designed to illustrate the standard grades, adopted by the Western Association at its last meeting. These properly labelled would prove a valuable adjunct to the exhibit as a whole. Do not overlook your responsibility in helping to fill the Exhibition Hall.

MESSRS. DAYTON, McHUTCHISON AND MEEHAN PLAN EUROPEAN TRIP

It is rumored on excellent authority that a prominent trio of the American Association of Nurserymen start for Europe immediately following the Boston meeting. It is said that President Dayton and Tom Meehan have consented to be chaperoned by the well known globe trotter James McHutchison. It is reported that the leading nurseries of England, Holland and France are to be visited in addition to the prominent Hofbraus of Germany. There will be no question about the success of the pilgrimage under the experienced guiding hand of "Mack H" and then he will have a pair of very apt pupils.

Correspondence

EDITOR NATIONAL NURSERYMAN:

In the April number of the NATIONAL NURSERYMAN I read the article written on the Federal Inspection bill, but in all fairness, Mr. W. P. Stark, of Louisiana, Mo., and Prof. S. J. Hunter, of Lawrence, Kans., should be mentioned in connection with the work of securing a favorable consideration of the bill. Mr. Stark and Prof. Hunter made two trips to Washington in the interests of the bill and helped to revise and remodel the bill when it seemed that it was going through with some very objectionable features in it, and I believe the two men had a great deal of influence in securing results, and should have credit for their valuable services, as they were urged to attend the meeting at Washington, by myself as chairman of the committee on legislation west of the Mississippi river.

Respectfully yours,
WESTERNER.

We beg to refer our correspondent to the March issue of the NATIONAL NURSERYMAN wherein the efforts of the various organizations and individuals concerned in the passage of the Federal Inspection act are specifically set forth by Professor Hunter himself.—EDITOR.

THE VALUE OF NURSERY LAND

[The two following communications were written in answer to the question on appraising lands in the May issue.—ED.]

The value of land for nursery purposes can not be accurately determined upon a nursery basis. There is no nurseryman who can really tell the actual amount it costs to grow a tree, very few nurserymen even can tell what it costs to grow any specific block of trees. How then can a valuation be placed on the land because of its ability to produce trees? The only way I can see to get at a valuation of this land is to base it upon the agricultural value of the land and what equally good land in an equally favorable situation can be bought for. The cost of planting and caring for an acre of trees varies with the kind of trees, with the season,

with the size of stock planted, with the local labor, market, and a number of other factors. It is never the same any two years, and the products of this cost also vary from year to year; and since we are under entirely different conditions, such figures would be of very little value. Also in regard to the percentage stand and percentage trees. In the first place, we do not grow grafted apple more than two years—in fact, some years in more favorable locations, we can grow a one year grafted tree 3 to 5 feet. Some years a large percent of them is over 5 to 6 feet tall, so that our conditions and our figures would be of no value for comparison, and even though you got such figures from a neighboring nurseryman, don't see how any such method could be used for placing a valuation on the land.

It may be a matter of interest to know that in certain locations where we have branch plants and where available nursery land is limited, we have to pay about 25 percent more rental than the land is actually worth for farming purposes. This land, which on an average of ten years will make grower \$8 an acre annually, will usually cost us for nursery purposes \$10 an acre; but who will say whether this additional charge is the result of the greater value of this land for nursery purposes, or whether it is due to an erroneous impression on the mind of the farmer that the trees hurt his land?

We have had damages against railroad companies for running through fields of growing nursery stock—these are generally settled on the basis of current catalog prices, less handling and selling cost, for merchantable trees destroyed, the number of these trees being determined by the number of trees dug from an equal area somewhere in the same block. Trying to distinguish in a general way where there are no specific factors taken into consideration between the value of land for nursery purposes and for agricultural purposes is very much like trying to find the difference between the cost of raising a pound of sirloin and the cost of raising a pound of round steak in the same steer.

STARK BRO'S. NURSERIES & ORCHARDS CO.

These questions are rather difficult to answer, and it is impossible to answer them definitely.

Ordinary land might grow one good crop of apple trees and never grow another, and we doubt if what is known as nursery land is worth any more than ordinary farming land in the same locality. We should say that a fair average cost of cultivating and planting an acre of apple grafts the first year would be about \$25, the second and third year, \$20 per acre. Think, if we got 80 percent of a stand of apple grafts, and when the trees were dug had 50 percent first-class, 35 percent second and 15 percent third grade, it certainly would be as much as our blocks would average, and believe rather better than they will average.

THE STORRS & HARRISON CO.

NEW DIRECTOR FOR SHAW'S GARDEN

The directorship of the Missouri Botanical Garden, left vacant by the resignation of Dr. William Trelease, has been filled by the election of Dr. George T. Moore, recently plant physiologist in the Missouri Botanical Garden.

THE AMERICAN ASSOCIATION OF NURSERYMEN THE BOSTON CONVENTION

As the time for the Boston Convention approaches Secretary John Hall imagines the Nurserymen must feel good at the prospect of a respite from service on the packing grounds and from the annoyances incident to spring packing.

Judging from the tenor the hundreds of letters this busy official has received unfavorable conditions have not been limited to any one section. From all over the country comes the universal testimony that there has "never been anything like it" and the secretary has found it necessary to keep the United States mails pretty busy carrying his pleading letters to tardy members urging registration and the forwarding of orders for space in the Badge Book. Even at this writing many are just responding by telegram or special delivery

REPORTS

Secretary—John Hall, Rochester, N. Y.

Treasurer—C. L. Yates, Rochester, N. Y.

Transportation Committee—D. S. Lake, Shenandoah, Iowa; Chas. M. Sizemore, Louisiana, Mo.

Legislative Committee—East of Mississippi River, Wm. Pitkin, Rochester, N. Y.; West of Mississippi River, Peter Youngers, Geneva, Neb.

Tariff Committee—Irving Rouse, Rochester, N. Y.

Committee on Coöperation with Entomologists—L. A. Berkmans, Augusta, Ga.

Committee on Publicity and Trade Opportunities—W. P. Stark, Louisiana, Mo.

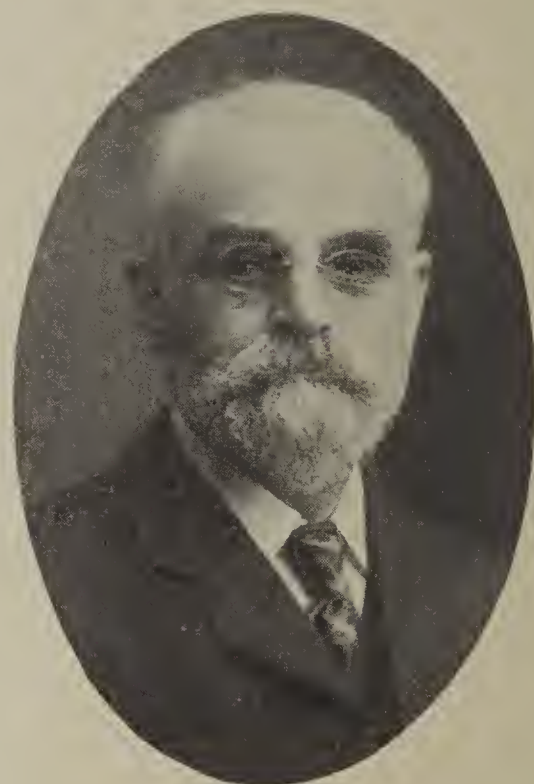
Committee on Exhibits—A. E. Robinson, Lexington, Mass.



W. H. WYMAN, North Abington, Mass.
Vice-President



J. H. DAYTON, Painesville, Ohio
President



JOHN HALL, Rochester, N. Y.
Secretary

whilst quite a number will fail to get registered in time for their name to appear in the Book.

This makes the Secretary feel badly, but he says, "it is no use saying hard things, for the Nurserymen this season are deserving of the deepest sympathy, and they will get curses enough from the unthinking."

"Suffering time will soon be over, however," and the fraternal fellowship of the Boston Convention will beguile their thoughts from the troubles they have borne.

Let every wide-awake, severely earnest, enthusiastic nurseryman ask his spouse to pack the family grip and invite her to accompany him to "Boston town" and get a sniff of sea air and some New England table fare, and revel among historic scenes. June 12-14 are the dates; Hotel Somerset the place of meeting; let an enthusiastic reception be given to the popular President—J. H. DAYTON.

PROGRAMME

WEDNESDAY, JUNE 12TH, 1912, 10 A. M.

Address of Welcome—Mayor Fitzgerald of Boston.

Response—J. Woodward Manning, N. Wilmington, Mass.

President's Address—John H. Dayton, Painesville, O.

Committee on Root Gall—E. A. Smith, Lake City, Minn.

Committee on Entertainment—J. Woodward Manning, N. Wilmington, Mass.

The Question Box is an innovation which it is hoped will be used freely and thereby provoke discussion which will tend to make the sessions interesting. It will be introduced at each session and be conducted by James M. Pitkin of Newark, N. Y.

Meeting of State Vice-Presidents, 1.30 P. M.

Members from each state are urged to consult together and select their new vice-president.

WEDNESDAY EVENING, 8 O'CLOCK

Illustrated lecture in Horticultural Hall (see Entertainment Programme.)

THURSDAY MORNING, JUNE 13TH, 1912, 9 A. M.

Report of Vice-Presidents on Officers and place of next Meeting.



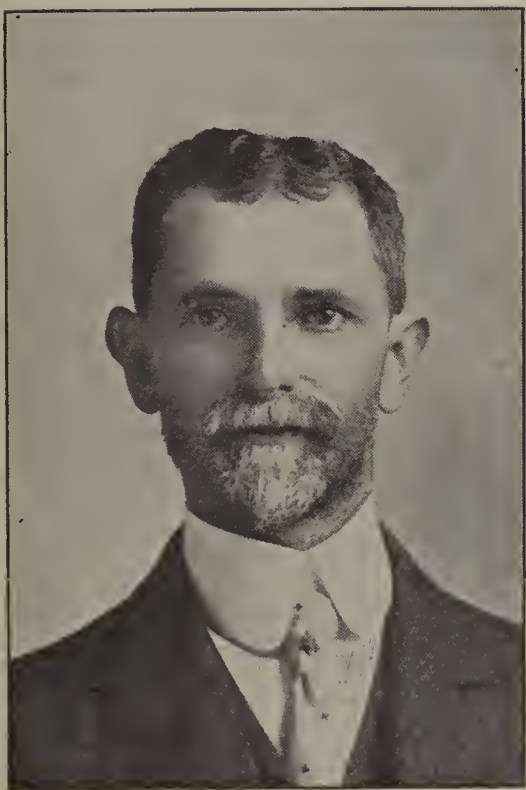
D. S. LAKE, Shenandoah, Iowa
Transportation



IRVING ROUSE, Rochester, N. Y.
Tariff



PETER YOUNGERS, Geneva, Neb.
Legislation West of Mississippi River



L. A. BERCKMANS, Augusta, Ga.
Co-operation with Entomologists



C. J. MALOY, Rochester, N. Y.
Program



W. P. STARK, Louisiana, Mo.
Publicity and Trade Opportunities



E. A. SMITH, Lake City, Minn.
Root Gall



WM. PITKIN, Rochester, N. Y.
Legislation East of Mississippi River



ORLANDO HARRISON, Berlin, Md.
Publicity and Trade Opportunities



J. M. PITKIN, Newark, N. Y.
Member Executive Committee

Massachusetts Yankee"—George S. Joselyn Fredonia, N. Y.

Greetings from Pacific Coast Association—P. A. Dix, Salt Lake City, Utah.

THURSDAY EVENING

Meeting of American Nurserymen's Protective Association in the Hotel Somerset at 8 o'clock, Thomas B. Meehan, Secretary.

Meeting of American Retail Nurserymen's Protective Association at 7 o'clock, Guy A. Bryant, Secretary.

FRIDAY MORNING, JUNE 14TH, 1912, 9 A. M.

"Should nurserymen continue to grow long lists of ornamental shrubs and plants, many of which are seldom or never called for?"—S. Mendelson Meehan of Thomas

Paper, subject to be selected — Prof. F. A. Waugh of the Massachusetts Agricultural College, Amherst, Mass.

"What promising new trees and shrubs for future ornamental use should be grown by nurserymen?"—Jackson Dawson of the Arnold Arboretum, Jamaica Plain, Mass.

Question Box.

Paper, subject to be selected — William C. Barry, Rochester, N. Y.

Question Box.

"Reminiscences of a

EXHIBITS AT THE BOSTON CONVENTION

ED. NATIONAL NURSERYMAN:

Gentlemen:

Exhibitors at the Nurserymen's Convention in Boston will have ample room in which to display their goods to best advantage. In addition to Exhibition Hall in Hotel Somerset, for light exhibits we shall use the Palm Room which opens directly out of the Auditorium. Heavy exhibits



E. M. SHERMAN, Charles City, Iowa
Member Executive Committee

and those requiring table space against the wall will be placed in the Exhibition Hall. As the floor of this hall is polished, heavy implements should have boards beneath.

To secure these extraordinary accommodations we have been obliged to guarantee the hotel management \$150 per day, a part of which will be paid by the local committee, and part by the exhibitors. A goodly number have already applied for space so that the expense to the exhibitors will not be a large item.

Indications point to a very large attendance at the Boston meeting, and those who have exhibits, will no doubt reap good results.

Please address all communications, stating the nature of your exhibit, to the



H. B. CHASE, Huntsville, Ala.
Member Executive Committee

Meehan & Sons, Germantown, Pa.

"A brief history of the nursery business in the West and Far West and comments thereon"—D. S. Lake, Shenandoah, Iowa; J. B. Pilkington, Portland, Oregon.

Unfinished Business.

Resolutions.

Adjournment.

Be punctual at all sessions.

Come prepared to participate in discussion of Reports of Committees and the papers to be presented.

undersigned, at Lexington, Mass.

Packages containing goods for exhibit should be sent as far as possible, by express, prepaid, to A. E. Robinson, Hotel Somerset, Boston, Mass.

Yours very truly,
A. E. ROBINSON,
Chairman.

SPECIAL CAR TO CONVENTION

For information regarding Special Car for the Convention at Boston, correspond with C. L. Yates, 218 Livingston Bldg., Rochester, N. Y.



A. E. ROBINSON, Bedford, Mass.
Exhibits



J. W. MANNING, North Wilmington, Mass.
Entertainment

AMONG NEW YORK IMPORTERS

Striking Features of the Import Business

Special Correspondence of THE NATIONAL NURSERYMAN by Messrs. M. C. Meikel and Edward L. Bernays

McHUTCHISON & CO., IMPORTERS

A Short Story of the Activities of a Hustling Firm

McHutchison & Co., 17 Murray Street, New York, fill a particular need and position in the nursery business. They are import agents and forwarders and in this specialized age of commerce are the link that binds the older producing

salers and jobbers, nurserymen and seedsmen through special price lists and trade lists issued by the foreign growers, giving prices for stock, out of the ground with packing charges extra. The orders are then placed with McHutchison & Co., for future delivery, usually a year ahead of time, at an open price to be determined later or at a given price,



A consignment of Madagascar Raffia in McHutchison & Company's Warehouse.

countries of Europe to the American wholesaler and jobber. McHutchison & Co. are the sole import agents of six large European firms, of France, Holland and Germany. Their diversity of interest is shown by the variety of the material they import. So we see azaleas, palms and bays from Arthur De Meyer in Ghent, Belgium; lily-of-the-valley pips from Bitterhoff Sons, Berlin, Germany; deciduous trees and evergreens from the Union Nurseries in Oudenbosch, Holland; French fruit and ornamentals from Lebreton of Angers, France; roses, boxwood and conifers from Sehaum & Van Tol in Boskoop, Holland; herbaceous plants from the Tottenham Nurseries in Dedemsvaart in Holland besides Japanese and English material from producers in these countries.

Business is done on a wholesale basis exclusively. The different sorts of stock are offered to the American whole-

at the discretion of the buyer. These orders are then sent to the foreign growers, specified by the buyer, and this grower renders his original invoice to the buyer, through his American sole agent, who also attends to all the custom house arrangements and the forwarding, if the goods are not shipped through in bond.

The credits of the business are on the long term basis. With the orders placed in the December preceding the delivery the following December, and final payment of all charges to the grower in the June following, it is indicated upon what sound business management the firm of McHutchison has been built up, and this is even more surprising when we note the large amount of commissions involved in the filling of large orders, yet the firm has never had to cancel a single order.

At present the firm is specializing in car lots to whole-

salers and jobbers. The classes of firms which receive these are divided as follows: 40 percent nurserymen, 40 percent florists, and 20 percent seedhouses. There is besides a large business done in raffia, which is shipped from Madagascar and sold here to florist and nursery supply houses and schools. As many as 500 bales of it arrived recently on the Kroonland. As many as 1370 bales of bay trees arrive in one shipment, but they are, of course, not seen at the office, but are forwarded directly to their destination from their piers here.

The demand has exceeded the supply in most lines of stock. This is explained by a number of things. The first that the crop in Europe was short, owing to an unfavorable season and second, to the fact that the demands in the United States have been increasing. Whether this increase is due to the increasing population, or whether it is due to the greater interest in things horticultural, or whether it is due to booms, like the apple boom of the northwest is hard to say. The fact remains that a similar condition has been noticeable for the last ten years. As long as the business has existed a yearly increase in the demands and in the profits has taken place.

In conversation with the head of the firm, Mr. James McHutchison, we found he had something to say on the problems vital to the nurserymen of the United States. As regards federal inspection it was his opinion that while federal inspection may be necessary, the federal law should be final as applied to all states. As it is now, the federal inspection, which takes place at the port of entry, is worthless in some states and carries absolutely no weight with it. Here indeed is there great need for reform.

As regards duties Mr. McHutchison was particularly strong in his expression regarding them. A sensible revision of the tariff on import plants is necessary, for as the duties are at present, they are neither relative nor comparative, but represent merely the whim and humor of their makers. A man that understands the nursery business ought to make the revision.

In order to keep in personal contact with the foreign growers, who are very independent, because of the great demand for their stock, Mr. McHutchison goes over to Europe every year. He had already had passage booked on the ill-fated Titanic for this year's trip. English is used in all the foreign correspondence as well as the personal conversation with the growers, which shows that with all their independence the foreigner greatly values his American trade.

Publicity of the ordinary type is of little use in developing new business, as the firm has got its well established trade. And yet with all that a system of keeping in touch and keeping tab on customers has been developed to a high degree of efficiency by the firm. Being shown the various means employed to this end seems like spending a day at a Business Method Show in Madison Square Garden.

EDWARD L. BERNAYS.

AMERICAN NURSERY COMPANY

Producers as well as Importers

The American Nursery Company, whose sales offices are in the Singer Building, New York, controls both the F. & F. Nurseries at Springfield, N. J., and the Bloodgood Nurseries

at Flushing, N. Y. The latter are the oldest nurseries in the United States, having been established in 1790.

The company of which Mr. Theodore Folk is president, Mr. William Flimmers, vice-president, and Mr. H. E. Holden, the sales manager, owns between 500 and 600 acres of ground, where the stock, sold to both wholesale and retail trade is grown. Much of the trade is the supplying of private estates and Mr. Holden lays stress upon the fact that this trade has been built upon solid lines, with no outside agents and very conservative advertisement.

Almost their entire stock is grown in this country, their specialties consisting of shrubs, vines, evergreens and ornamentals. The biggest trade has been in Norway maples, which are used for avenue and street. There is a large demand at present from the small towns of New Jersey and Long Island. The recognition of the value of shade trees is shown by the fact that there are in most of these towns shade tree commissions whose duty it is to seek out and buy trees.

This year, which has been the heaviest the nurseries have ever had, has been especially a year of rhododendrons. While many of these plants have been imported direct from Holland and England, the domestic rhododendron has gained great favor here owing to its greater hardiness. Instead of winter storing, heeling is practised exclusively, owing to the demand for freshly dug stock.

Mr. Holden calls attention to the fact that great preference is shown for plant materials of the hardy perennial type. This is in accord with the tendency to live in the country the year round. People plant their gardens with a view to permanence, nowadays.

M. C. MEIKEL & E. L. BERNAYS.

ANDRE L. CAUSSE

Representing a Noted French Firm

Mr. Andre Causse, who since 1883 has been agent for the LeRoy Nurseries, with an office in New York, explained that nurseries are only a side line of his work. The greater portion of his time is devoted to the importation of dried fruits. Indeed he told us that he has even suggested that the agency which he holds be turned over to a younger man, a suggestion, however, which met with so little favor, that he has been dissuaded from the idea of retiring from the nursery field. He still attends the National Nurserymen's Convention regularly, not so much with the idea of meeting new people, but rather that he may keep in touch with his old customers; and a little too, one gathers, just for the sentiment of it all.

Mr. Causse does not specialize in any one thing, but deals in both fruit stocks and ornamentals. Apples, pears and quinces he believes to be in the lead in the present day. But with the growing wealth of the country and the enlargement of the country life idea, there has come the greater demand for ornamental plants, the two favorites at present being the azalea and the rhododendron.

In regard to the new inspection system, providing for inspection, not at the port of entry, but at the final destination, Mr. Causse has nothing but praise. Before the adoption of this method stock was often damaged at the port of entry by frost or careless handling.

M. C. MEIKEL & E. L. BERNAYS.

SOME NOTES ON PROMINENT NEW ENGLAND NURSERIES

THE BLUE HILLS NURSERIES

The Blue Hills Nurseries, owned by Messrs. W. W. Hunt & Company, are located two miles from the center of the city of Hartford, Connecticut, while the salesroom and city offices of the firm are at 24 State street, in the very center of the city. The nursery grounds comprise ten acres planted solid with ornamental and shade trees, shrubs, evergreens, and herbaceous plants. Two good packing houses, an office and a fire-proof cellar complete the equipment on these grounds. The firm carries on a general nursery and landscape gardening business, and have been in the work for over twenty years.

THE NEW ENGLAND NURSERIES COMPANY

The New England Nurseries at Bedford, which were formerly operated by the Shady Hill Nursery Company, contain approximately 180 acres of land all under cultivation. A general variety of ornamental stock is grown, and special attention is given to a most complete collection of herbaceous perennials. President, Theo. J. Smith; treasurer, John E. Gilcreast; manager, John Kirkegaard.

The property is located 15 miles from Boston on the Boston & Maine, Southern Division, and can be reached by train from the North Station or by electric cars from Arlington Heights.

HEADQUARTERS FOR NATIVE PLANTS

Harlan P. Kelsey's New Nursery at Boxford, Mass.

Mr. Kelsey's predilection for native plants is well known. His extensive nurseries in North Carolina together with the Salem adjunct have been described at length in this journal.

We are now informed that Mr. Kelsey is moving from his relatively cramped quarters at Salem to Boxford where he has acquired land enough to accommodate his largely increased plantings of broad leaved evergreens, mainly rhododendrons, azaleas, kalmias and other fine native material.

This acquisition will allow Mr. Kelsey to handle his rapidly extending business in broad leaved evergreens in a much more efficient manner than formerly. It is gratifying to note that the interest in native material is increasing each year owing to the persisting efforts of men like Kelsey, Manning and others.

NURSERY BUSINESS BOOMING

C. R. Burr & Company Have Large Force Hustling Out Shipments of Fruit and Ornamental Stock

One Manchester, Connecticut, firm which apparently isn't affected by the threatened business depression is C. R.

Burr & Co., the Oakland Street fruit and ornamental stock growers. At the present time they have a large force busy at the big concrete stockhouse, bundling, packing and tagging for shipment thousands of young trees and shrubs. The company has been working on wholesale orders for about a month and is now busy getting out retail orders, goods that the nursery agents have been selling in all parts of the country. All this stock has been in cold storage during the winter months to protect it from both frost and dryness. The roots have to be kept moist so that the plant will hold its

sap and be in a healthy condition when shipped. The atmosphere of the big concrete stockhouse is about the same as an unheated cellar under ordinary conditions, noticeably cooler than outer air.

The stockhouse contains hundreds of thousands of shrubs and young trees, both ornamental and fruit. Most of this has been sold and all will have to be packed and shipped within the next four or five weeks. Mr. Burr says the present weather is ideal for shipping stock and he is making the most of the opportunity. Practically all of the seedlings or young stock is imported from France. The company received 150,000 apple seedlings during the past winter and these will be planted during the coming spring and summer. There has been a heavy demand for both apple and peach stock. Mr. Burr says he

could have sold 200,000 more apple trees if he had had them.

Two years ago last fall the company built its first concrete stockhouse. It was a big building, but business soon demanded another and last year a much larger building was erected. Now both buildings are well filled with nursery stock and the men have scarcely room to work in preparing stock for shipment. Mr. Burr says it will not be long before another stockhouse will be demanded by the growth of the business. They are now planning to erect a permanent office building on Oakland Street.

C. R. Burr started out with the R. G. Chase Company in 1898 and was with them about a year and a half. Then he jobbed in trees until 1903, when he started in a small nursery at Manchester, Connecticut. He has now about three hundred acres under cultivation, and specializes in berry seedlings more particularly, following along with privet, peaches, apples and a general line of stock. It may be said, doubtless, that they grow more of the general line than any other nursery east of the Hudson River. They ship all over the New England States, and also do a large business as far west as Indiana, through their traveling salesmen.



Mr. W. W. Hunt of The Blue Hills Nurseries.

Mr. Burr is a genuine favorite with the nurserymen, especially those in Rochester, who always hold a warm welcome for him when he comes on his semi-annual trips. He is a very jovial fellow and a live wire in the business, which is due to his success.

THE ELM CITY NURSERY COMPANY

The Elm City Nursery Company is located at Edgewood, just west of New Haven, Connecticut, conveniently reached by ample trolley service. The territory covered by the nurseries (some 100 acres) is a well drained sandy loam.

The business is largely devoted to the producing of ornamental stock, much space being devoted to the develop-

hedges, over a mile in length, which are without doubt the finest in the country.

After the death of Mr. Thomas C. Thurlow, in the summer of 1909, the business was incorporated, with George C. Thurlow as president, and Winthrop H. Thurlow as treasurer. The holdings at the present time comprise about 275 acres, 75 acres of which is planted to nursery stock, increasing yearly to meet the call for the increase in demand for ornamental stock in New England. A large dairy is run in connection with the nursery, as it is found to be profitable to produce the manure needed for cultivation on the place.

A full line of nursery stock hardy in New England is grown, specialties being sugar and Norway maples and choice



A View in the Cherry Hill Nurseries, West Newbury, Mass.

ing of fine, large specimens, notably in evergreens, shade trees and shrubs. The business is the outgrowth of a small beginning made about thirty years ago by Mr. C. P. Lines. Eighteen years ago a copartnership was formed, and fifteen years ago the business was incorporated under its present name. A well equipped landscape department under experienced supervision has grown to be an important feature of the business.

CHERRY HILL NURSERIES

The Cherry Hill Nurseries were established in 1832 by George Thurlow, the grandfather of the present owners, who grew fruit trees chiefly for the many orchards that were then being planted throughout New England. In 1858 his son, Thomas Chase Thurlow, entered the business with him, and ornamentals were taken up and grown in great variety, many new and rare species being added as they appeared in this country and Europe.

The nurseries are situated in Essex County, in the beautiful Merrimac Valley, about half way between Newburyport and Haverhill. One of the characteristic features of the nurseries is the beautiful, well kept Norway and white spruce

evergreens, which can be grown to perfection on the rich soil. One of the main features is the large and extensive plantings of peonies, embracing all the better varieties, which when in bloom attract many visitors from all over New England.

NEW CANAAN NURSERIES

From a modest beginning in the year 1848, this nursery was started by the late Stephen Hoyt. At that time he had less than 100 acres of land. He started growing fruit trees and for a number of years the principal stock raised was apple and peach trees, and later he grew a few ornamental trees and shrubs, but in only a limited number of varieties.

He was assisted in the work by his two sons, James and Edwin Hoyt, up to the time of his death in 1878, after which they carried on the nurseries, until the business grew to be one of the largest in this section of the country. In 1903 it was reorganized into a stock company with Edwin Hoyt as president. He was a great lover of the nurseries and was active in the work up to the time of his death in April, 1908, in the seventy-sixth year of his age.

Stephen Hoyt, his son, was made president after his death, and is holding the office at the present time, the firm still retaining the same name. James Hoyt died in January, 1910. So now this nursery is owned by the third generation of the family, and it has become one of the largest in the country, covering several hundred acres of land. Every kind of nursery stock is now grown here that will grow in this locality, and the firm are also large importers of the European and Japanese stock. They do a large business in the moving and transplanting of big trees, moving trees from twelve to fourteen inches in diameter, taking them with a large ball of earth. A great deal of this work is done during the winter months, as many trees do better when moved with a frozen ball. They took up this branch of work fifteen years ago, when they bought out the rights of the Ryder Machine for this portion of Connecticut, and have been very successful in doing this kind of work.

Quiz Column

STORAGE MATTERS

ED. NATIONAL NURSERYMAN:

We are making arrangements to put up a storage building 75 x 100 feet, and would be glad if you would give us any information as to the construction of this building. We are in a position to saw the frame and rough boards, etc., out of our own woods. As we understand it, this building should be weather-boarded inside and out, with probably building paper between. We will appreciate any information that you can give us, as we are very desirous of putting up a building that will be of good service to us. We also would like you to tell us about what is necessary in ventilation, etc.

Baltimore, Md.

FRANKLIN DAVIS NURSERY CO.

ANSWER.—In your locality probably a good frame building with one air space made by the studs boarded inside with matched lumber and double boarded outside with paper between will serve your climatic requirements. In colder sections two air spaces are essential. Of course, the most satisfactory in the long run is the building of hollow tile or concrete construction.

We refer you to THE NATIONAL NURSERYMAN for February, pp. 47 and 48, for description of storage methods. Also, the April and May issues contain accounts of storage houses in Rochester, Newark, Geneva, and Dansville.

Business Movements

GENEVA NURSERYMEN DOING A THRIVING BUSINESS

According to a note in a recent issue of the *Geneva Daily Times*, the demand for nursery stock has not been falling off; for it is estimated that between four and five million trees and shrubs were shipped by Geneva nurserymen this spring. The territory served by these growers reaches from the Atlantic to the Mississippi, and from the St. Lawrence River on the north to the Ohio River on the south. The W. & T. Smith Company heads the list for spring orders, having shipped, it is said, as much stock as all the other Geneva nurseries together. Rice Brothers shipped some 2,800 boxes and The R. G. Chase Company 1,800 or so. Besides these firms, there are about twenty other firms furnishing goods mostly to the retail trade.

FRENZIED QUARANTINE

Is this country going inspection-mad? It would almost appear so, judging from the way in which legislators, experiment stations and their numerous retainers, aided and abetted by the public press and sundry horticultural interests are working themselves and the public up into a mood which is little short of hysterical, for inspecting and quarantining anything and everything horticultural regardless of whatever injury may thus be inflicted upon honorable business interests. Almost every day brings some news of "bills" and proposed restrictive enactments of the most drastic and often impracticable nature, or details of some arbitrary hold-up. When a valuable importation of azaleas is ruthlessly sacrificed because caterpillar egg masses are found on two plants; when the governor of a great state signs a bill with such a frivolous provision as "that packages of seeds must contain the name and address of the seller, the name of the seed and percentage of purity;" when the U. S. Post Office authorities, actually without previous notice, holds up and prohibits the mailing of young plants or cuttings of any kind in any part of the country without a certificate of inspection, it would seem that the limit had been about reached. It might be well for those dealers in horticultural products whose interests are thus assailed to do some inspecting on their own account and endeavor to ascertain the real motives back of such legislation and what its probable effect will be. When the government interferes with any legitimate business it should always be for the benefit of the whole people and never to further the selfish ends of any section or to give undue advantage to any one section or class over any other. We all recognize the terrible menace of destructive insects and plant diseases and fully realize the need of proper measures to prevent their spread, but these measures should be framed and carried out with the greatest care, lest they become oppressive or furnish excuse for unfair discrimination. Whether any such solicitude for a "square deal" has been exercised in the case of some of the state enactments thus far is a question which is open to considerable doubt.—Editorial from *Horticulture*, Boston, April 27, 1912.

ANNOUNCEMENT OF AMERICAN PEONY SOCIETY

(Continued from page 208)

For the best collection of not less than 25 varieties, a prize of \$25, and a second prize of \$15. This will be open to amateurs only.

For the best new seedling of American origin not previously exhibited \$15.

A Certificate of Merit will be awarded to any new variety exhibited, not in the trade previous to 1910, if deemed worthy of the same by the judges.

The exact date of the meeting will be announced in the trade papers and each member will receive personal notice by card.

Clinton, N. Y.

A. P. SAUNDERS, Secretary.

PRODUCTION OF FRUITS AND NUTS IN CALIFORNIA

VALUE OF CROPS IN 1909 OVER \$50,700,000

A preliminary statement of the general results of the Thirteenth Census relating to tropical fruits, orchard fruits, grapes, small fruits, nuts, and certain specified fruit products in California, has been issued by Director Durand, of the Bureau of the Census, Department of Commerce and Labor. In addition to the number of farms reporting and the number of trees and vines of bearing age, as of date April 15, 1910, the summary gives the amount and value of fruits and nuts produced in 1909. The fruit products shown are those prepared on farms only, and do not include those reported by manufacturing establishments. Comparable data are given for 1900 wherever possible.

The statement was prepared under the direction of Le Grand Powers, chief statistician, and John Lee Coulter, expert special agent, for agriculture. Further analysis may result later in slight modifications of the totals, but it is not expected that they will affect materially the figures.

TROPICAL FRUITS

The production of all tropical fruits in 1909 was valued at \$16,752,101, as compared with \$7,219,082 in 1899, an increase of \$9,533,019.

Oranges to the number of 14,436,180 boxes, valued at \$12,951,505, were produced in 1909. The lemon production amounted to 2,756,221 boxes, and the value to \$2,976,571; olives, 22,990,353 pounds, valued at \$401,277; figs, 22,990,353 pounds, valued at \$260,153; pomeloes, or grape fruit, 122,515 boxes, valued at \$143,180, while the production of all other tropical fruits amounted to 140,374 pounds, valued at \$19,415.

ORCHARD FRUITS

The production of all orchard fruits was given as 31,501,507 bushels in 1909, as compared with 22,690,696 bushels in 1899, a gain of 8,810,811 bushels. The value of the 1909 crop amounted to \$18,358,897, as against \$14,526,786 in 1899, an increase of \$3,832,111.

There were 9,317,979 bushels of plums and prunes produced in 1909, valued at \$5,473,539. The yield of peaches and nectarines amounted to 9,267,118 bushels, and the value to \$4,573,775; of apples, 6,335,073 bushels, valued at \$2,901,662; apricots, 4,066,823 bushels, at \$2,768,921; pears, 1,928,097, at \$1,660,963; cherries, 501,113 bushels at \$951,624; and all other orchard fruits, 85,404 bushels at \$28,413.

GRAPES

In 1909 the production of grapes amounted to 1,979,686,525 pounds. This was an increase of 1,258,253,125 pounds over 1899, at which time 721,433,400 pounds of grapes were gathered. The value of the 1909 crop was \$10,846,812, while in 1899 it was \$5,622,825.

SMALL FRUITS

There was an increase of 12,242,169 quarts in the production of small fruits during the ten years since 1899. In 1909 the yield equaled 26,824,120 quarts, valued at \$1,789,214, and in 1899, it was 14,581,951 quarts, valued at \$911,411. Strawberries to the number of 15,694,326 quarts were produced in 1909, valued at \$1,149,475; raspberries and loganberries, 5,222,117 quarts, at \$304,169; blackberries and dewberries, 4,898,524 quarts, at \$282,383; currants, 852,378 quarts, at \$43,508; gooseberries, 145,119 quarts, at \$9,086; and of all other small fruits, 11,656 quarts at \$593.

NUTS

The production of nuts in California was reported as 28,378,115 pounds, valued at \$2,959,845 in 1909, while in 1899 it was 17,775,505 pounds, worth \$1,518,708. A total of 21,432,266 pounds of Persian or English walnuts, valued at \$2,247,193, were reported in 1909. The almond production amounted to 6,692,513 pounds, valued at \$700,304; and of all other nuts, 253,336 pounds, valued at \$12,348.

FRUIT PRODUCTS

The number of farms reporting the production of cider in 1909 was 481, and the number of gallons produced, 118,456. This is an increase over 1899 of 43,013 gallons.

Vinegar to the amount of 244,683 gallons was produced in 1909, as against 199,679 gallons in 1899. The number of farms reporting in 1909 was 973.

Over 16,000,000 gallons of wine and grape juice were produced on 2,163 farms in the state in 1909, as compared with 5,492,216 gallons in 1899, an increase of over 10,500,000 gallons.

Only 78 farms reported the production of olive oil in 1909, and the quantity produced was 95,955 gallons. This is a gain of 87,510 gallons, since 1899.

Raisins and dried grapes to the amount of 169,210,679 pounds were produced on 4,551 farms in 1909. No published reports are available showing the quantity of raisins and dried grapes produced in 1899.

The production of other dried fruits in 1899 amounted to 189,495,705 pounds, and the number of farms reporting was 8,373. In 1899 there were 117,935,727 pounds of such fruits produced.

F. W. Watson, Topeka, Kan., is preparing to erect a 2-story concrete storage house, 70 x 80.

A barn of The Farmers' Nursery Co. of Dayton, O., was destroyed by fire May 4, which caused a loss of \$2,500 with only \$500 insurance. The origin of the fire is a mystery.

Our Book Table

ENGLISH WALNUTS, Walter Fox Allen, Lawrenceville, N. J. Published by the author. Illustrated. 29 pages. 6¼ x 4¾."

One of the virtues of this book consists in the fact that when you want to plant English walnut trees, you can find out from its pages how to do it without wading through a lot of material which, however interesting it may be, is not of immediate importance. Mr. Allen notes the rapidly increasing interest in the English walnut, every pound of which contains as much nutriment as eight pounds of steak. A second reason for the planting of these trees is their value as shade trees. As with the pecan in the South, statements of prolificacy must be taken largely from scattered individual trees; for the commercial orchard is almost unknown, taking the country as a whole. But there are records of single trees bearing eight hundred pounds of nuts in a season. Much is now being said about nuts, but in few places could one find so much about *Juglans regia* in so small a space as in this little volume which touches upon history, yield, importations, planting, care and varieties.

THE FORESTER'S MANUAL, Ernest Thompson Seton. Published by Doubleday, Page & Co. Illustrated. 141 pages. 8¼ x 5½". Price \$1.10.

This book is announced as No. 2 of Scout Manual Series, by the Chief Scout, Boy Scouts of America. But the professional nurseryman, as well as the Boy Scout, may find valuable information within its covers. The author says in the preface, "In it I aim to give the things that appealed to me as a boy: first, the identification of the tree; second, where it is found; third, its properties and uses, and last, various interesting facts about it." One hundred of the best known native timber trees of Northeastern America are described in groups, of which there are twenty-four, as Pinaceae, Conifers or Pine Family, and Salicaceae, The Willow Family. The treatment of each species consists in (1) a map giving the area in which it is found; (2) the family, with common and scientific names of the species; (3) description of tree and wood, weight, uses, etc.; and (4) illustrations of leaf and fruit, made in most cases from fresh specimens in the woods. This publication of the present year from the pen of an author whose name vouches for its accuracy will no doubt take its place beside his writings on other subjects as a book combining many items of interest and value to old and young alike.

Personal Mention

PROGRESSIVE NURSERYMEN IN DEMAND

With a unanimous vote leading all the men on the ticket, Orlando Harrison was elected mayor of Berlin for the sixth time. His platform was Better Streets, more economy in expenditure of the town's money, more substantial improvements and immediate action to build macadam streets. Improvements will be made at once as the whole fight was made on Improvements for Berlin.

Harlan P. Kelsey has purchased eighty acres of land at Boxford, Mass., which he will use for nursery purposes.

J. Dykhuis of Felix & Dykhuis, Boskoop, was in Rochester the middle week of May on his eleventh annual trip. Mr. Dykhuis is the secretary of the Pomologische Vereeniging, or horticultural society, at Boskoop.

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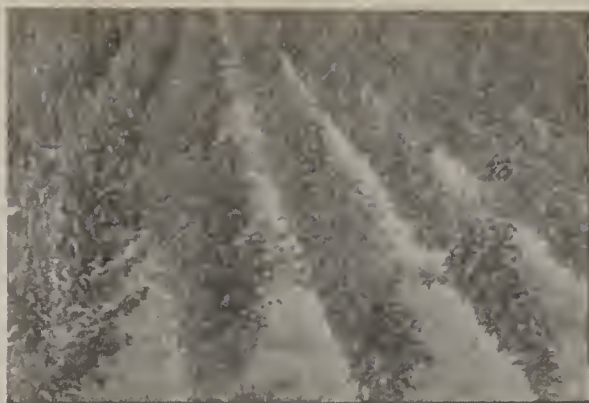
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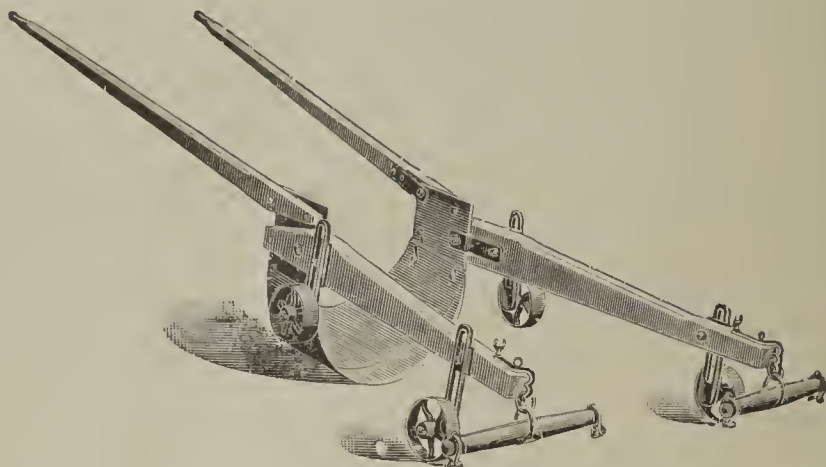
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Seeds of the very best quality at low prices should write
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FRITSCH & BECKER

Wholesale Seedsmen

Grosstabarz, Germany

Offers of American Tree Seeds appreciated.

Code 5th Edition A. B. C. used.

Rhododendrons, Hardy Hybrids, named in the
best modern American varieties, Andromeda
florabunda, Ericas, Azaleas, Kalmia latifolia,
and other American plants.

Pinus Cembra, Retinosporas in variety, Box in variety,
Golden Privet, Copper Beach, and other ornamental
Trees and Shrubs.

Roses in variety, Standards or Bushes.

W. FROMOW & SONS

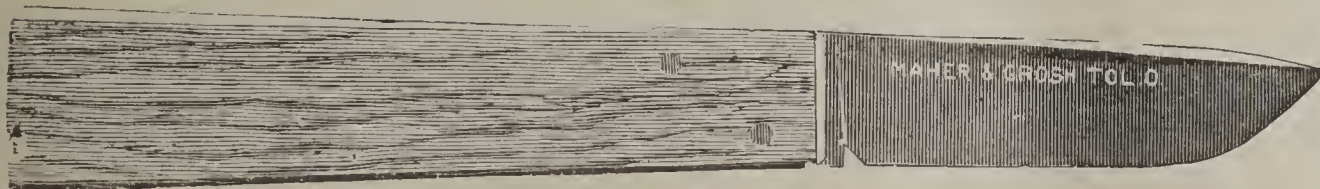
WINDLESHAM NURSERIES, SURREY, ENGLAND

Messrs. A. RÖLKER & SONS, 31 Barclay St., New York,
P. O. Box 752, Sole Agents for America.

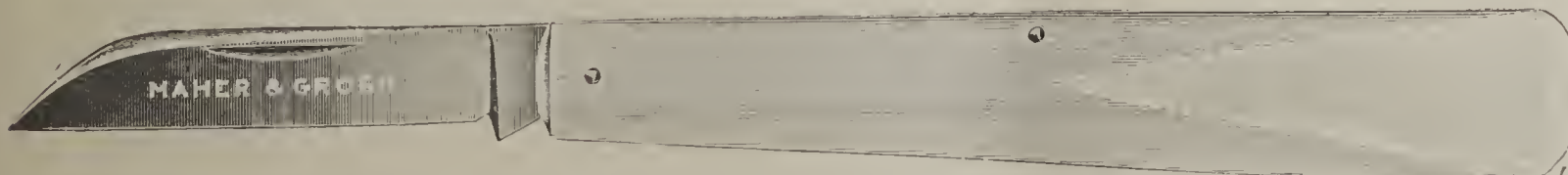
LEVAVASSEUR & SONS, Nurseries at Ussy and Orleans FRANCE

Wholesale Growers of Fruit Tree Stocks, Ornamentals, Evergreen Seedlings, etc. Best Grading Quality, and Packing
Largest shippers to this country. All leading nurserymen are our regular customers. Orders booked now for delivery for season
1912 to 1913 at open prices, so as to secure quantities. For further information address our

American Agents. AUGUST RÖLKER & SONS, New York, 31 Barclay Street or P. O. Box 752.



BUDDING KNIFE, No. 94. Sample by mail, 6 for \$1.25.



PROPAGATING KNIFE, No. 89½—50c. Blade Closes. You have paid 75c. for a much poorer knife.

90 Adams Street MAHER & GROSH CO., Toledo, Ohio

Send for 12-page Special
Nursery Catalogue.

NURSERYMEN'S KNIVES

Hand Forged Razor Steel Warranted

Nursery Pruner, - 50c.
Pocket Pruner, - 60c.
Pocket Budder, - 35c.
Pocket Grafting, - 40c.

WE SOLICIT
DIRECT TRADE

When writing to Advertisers please mention The National Nurseryman.

ORNAMENTAL STOCKS

NURSERIES
420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.
300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
400 varieties of Perennials.
800 varieties of New and Old Roses.

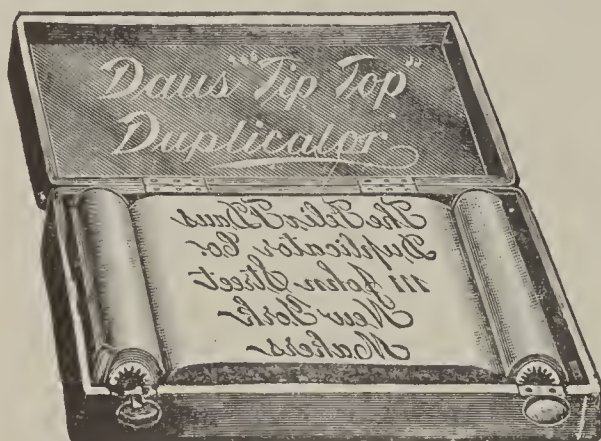
We Have No Agents.
Write direct to us and
ask for **WHOLESALE
CATALOGUES**

TRANSON BROS. & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

BARBIER and CO., Successors,

Orleans, France



DON'T JUDGE BY THE PRICE

The high prices charged for the majority of office appliances may lead some people to doubt the value of the

DAUS' IMPROVED TIP TOP DUPLICATOR

On account of its low price (\$5.00), but the fact that it is used and endorsed by the N. Y. Central Railroad, U. S. Steel Corporation, Westinghouse Electric Co., etc., proves that the work done must be first-class. High-class endorsements are strong arguments, but we do not depend upon them to sell our Daus' Tip Top, preferring to have you try it yourself, before buying, by taking advantage of our offer of **10 DAYS' TRIAL WITHOUT DEPOSIT.**

Each machine contains a continuous roll of our new "Dauseo" Oiled Parchment Back duplicating surface which may be used over and over again. Five different colors can be duplicated at once. No printers' ink or expensive supplies required.

100 copies from pen-written and 50 copies from typewritten original.

Complete Duplicator, Cap Size **\$7.50** Less Special Discount of **\$5.00**
(prints 8½ x 13 inches), Price, **33⅓% NET**

CIRCULAR OF LARGER SIZES UPON REQUEST

Felix A. G. Daus Duplicator Co. Daus Building, 111 John Street, New York

The future bedding rose

"Mevrouw, G. W. Van Gelderen"

(Gloire de Dyon X Captain Christy)

A perfect hardy H. T. Rose; color creamy-rose, very free flowering a strong grower, also easy to force. *Ready for shipment after October 1, 1912.*

Paeonia Chinensis "W. Mesman"

(Kersbergen)

Pure white, earliest of all and very free flowering. *Ready for shipment September 1912.*

V. G.'s SPECIALTIES:

Azaleas, Evergreens, Magnolias, Rhododendrons, Roses, old and new varieties

Upon demand, we will mail you full descriptions with prices of Novelties, and our general price list of Nursery-stock.

G. W. VAN GELDEREN
BOSKOOP, HOLLAND

English Nursery Stock

Extensive stock of *RHODODENDRONS*, English grown, hardy kinds a specialty. *These are specially grown for America.* Bushy, well-grown plants, budded, 1½ to 2 ft., 2 to 2½ ft., and a few kinds 2½ to 3 ft. *ANDROMEDA, AZALEA, KALMIAS, etc.*, a good stock. *HARDY CONIFERS*, a large stock. Low prices can be quoted on all Conifers. *ORNAMENTAL EVERGREEN TREES, FRUIT TREES*, trained and in pots. *TRANSPLANTED FOREST TREES, FRUIT TREE STOCKS, etc.*

ROSES, dwarf and standard—all leading kinds in quantity. *MANETTI STOCKS*, 1-yr., fine.

The stock is in excellent condition. *First grade stock only supplied.* Thirty years successful trading in the States. No agents. Write direct for wholesale catalogue.

Walter Charles Slocock
Goldsworth Nursery

Half an hour's rail from London by
L. & S. W. Ry., Main Southampton Line.

WOKING
Surrey, Eng.

When writing to Advertisers please mention The National Nurseryman.

35TH YEAR

Pan Handle Nurseries

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringaeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

J. K. HENBY & SON

GREENFIELD, IND.

5,000,000

SEEDLINGS and TRANSPLANTS

WHITE PINE and other CONIFERS

DELIVERY SPRING, 1912

The North-Eastern Forestry Co.

NEW HAVEN, CONNECTICUT

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.

South Canal St., Dayton, Ohio

Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

HIGH
GRADE



LARGE
VARIETY

Correspondence solicited. Price list upon request.

W. B. WHITTIER & CO.

South Framingham, Mass.

WE OFFER FOR FALL, 1912,

Peach Trees in car lots

NORWAY MAPLE

CALIFORNIA PRIVET,

SILVER MAPLE

1 year

325,000 APPLE, 1 year, grafts and buds,
in COMMERCIAL VARIETIES

The Greenbrier Nursery Co., Inc.

Greenbrier, Tenn.



Everything in

SMALL FRUIT PLANTS

100,000 Transplanted Raspberry Plants

Ask for price list.

W. N. SCARFF, New Carlisle, O.

FOREST TREES

SEEDLINGS AND TRANSPLANTS

in quantities for retimbering or lining out; healthy stocks, from the very extensive and well kept Wholesale Nurseries of

H. H. PEIN, Halstenbek, Germany

for latest trade list and all other inquiries address our sole American agents:

August Rölker & Sons

P. O. Box 752, or
31 Barclay Street

New York



Small Fruit Plants for the Nursery Trade, Spring 1912

100,000 Blackberry Plants of Root Cuttings and Suckers. Black and Purple Raspberry Tips. Golden Queen Raspberry. Red Raspberry. Dewberry. Gooseberry Layer Plants. Rhubarb, one- and two-year old roots and Divided Roots, Horseradish Sets, Etc. WRITE FOR PRICE LIST.

P. D. BERRY, Dayton, Ohio

WE GROW
APPLE SEEDLINGS

“IT’S OUR BUSINESS---NOT A SIDE LINE ”

Place Your Order Now and Have it Filled Complete !

WE WILL furnish stocks absolutely
=== free from Aphis, Knots, Fungus
or disease of any kind. Seedlings that
are grown, graded and handled by
Specialists who know how.

Write for prices on early orders, giving grade and quantity.

We will satisfy you with both grades and prices.

F. W. WATSON & CO.
TOPEKA, KAN.



EXPORTATION ALL OVER THE GLOBE

Felix & Dykhuis

High Grade Boskoop Nursery Stock

BOSKOOP, HOLLAND

Boskoop Nursery Stock

OF ANY DESCRIPTION

QUALITY BETTER THAN PRICES INDICATE

Beautifully Illustrated Catalogue Free

Our Mr. J. Dykhuis is attending the *BOSTON CONVENTION*, Hotel Somerset, Badge No. 273.

He will be glad to meet you.

LOOK FOR HARRISONS' AT BOSTON

American Association of Nurserymen
Annual Convention, June 12 to 14

BADGE No. 2

This 1912 convention ought to be the biggest in the history of the Association. Every year ought to see an increase in attendance at the meetings, in the membership of the society, and in the value of these gatherings to the nurserymen of America. We want to see you at Boston; we want to give you the "glad hand"; and, when the convention is over,

WE INVITE YOU TO VISIT BERLIN

and see our nurseries. Our representatives may tell you about our 3000 acres, but you cannot realize what our nurseries are unless you see them. It's an easy trip from Boston to Berlin—take the Federal Express from Boston at 8 p. m., arriving in West Philadelphia the next morning in ample time to connect with train reaching Berlin at noon. Ask our representative for detailed schedule.

You will need some stock before the convention—and after it, too, for it's going to boost business—so here's a list of fruit trees in varying sizes and varieties, that will please you and your trade.

LET US QUOTE PRICES ON THESE, OR ON ANY OTHER STOCK YOU REQUIRE

	APPLES									
	One Year					Two Year				
	5-6	4-5	3-4	2-3	1-2	5-6	4-5	3-4	2-3	1-2
A. G. Russett						200				
Alexander			50				10			
Baldwin	350	200	30	800	200		40			
Benoni						180	40	10		
Ben Davis						450				
Bismarck							70	20		
C. R. June						120				
Carthouse						70				
Coffelt Beauty						200	10			
Cooper's Market						200	70			
Delicious		400	200							
Duchess		200								
Early Harvest	10	20				20				
Early Ripe	50									
Fameuse	400	350	200				50			
Fanny						40	20	10		
Fourth of July						120	10			
Gano	50	40	10	30						
Grimes' Golden	200	100	300	200		10	10			
Ingram						180				
Jonathan	500	50	80	800	200					
King	30	40								
Kennard's Choice						150				
Late Raspberry						90	10			
Lawver						100		10		
Limbertwig						200	10			
Longfield							60			
M. B. Twig	60	1500	500	200	200	40	20			
Mann						80	10			
McIntosh	320	100	300	200			350			
Mo. Pippin						160	10			
Myrick						300				
Nero				20						
N. W. Greening	50	200	100							
P. W. Sweet						600	20			
Paynes' L. Keeper						300				
Rawles' Janet						10	10			
R. I. Greening	250	200	300	200	100					
Rolfe						110	10			
Rome Beauty		100	200	300	100					
Salome						100	20	10		
Seck-no-Further							20			
Smith's Cider	25									
Spitzenburg		40					40	90	20	20
Springdale						110				
Stark		300	50	50		200				
Stayman's	100	20	20	2500						
Tallman Sweet	100									
Walbridge						10		40		
Wealthy			1500		1500					
Wm. Early Red	20	200	20	100	90					
Winesap	80		800		900	500	60			
Winter Banana	20									
Wolf River	500	100				20				
Yel. Transparent	50	50	40			1000	800	200	300	
Yel. Belleflower						40	20			
York Imperial	50	400	1500	1000	1000					
Liveland Raspberry							40			

CRAB APPLES

Golden Beauty	125				
Martha	150				
Transcendent	260	350	200	300	400

PEACHES

Admiral Dewey	100				10
Albright Oct		30	10		30
Alton	10	10			50
Amsden June	50	40	30		80
Apex			125		
Arkansas Beauty	30	30			80
Arp Beauty	50	10			30
Beers' Smock	100	100	10		20

PEACHES—Continued

	5-6	4-5	3-4	2-3	1-2	6-7	5-6	4-5	3-4	2-3	1-2
Bilyeu's Late Oct			100		20						
Bokara	40					10					
Brandywine	10	10				50					
Bray's R. R.	40	40	115			40					
Buston's Oct	10	10	10			20					
Capt. Ede	250	60	30			60					
Carman				300	200						
Chair's Choice						100					
Champion						80					
Chilow	10										
Chinese Cling	20	20	10			125					
Cobbler	25	40				20					
Cornelia	70	60	40	10		80					
Connett's So. Early	10	40	10								
Crawford Early		20	300	200	200						
Crosby			20	30							
Denton	300	200	250		160	240					
Early Elberta						5					
Early Michigan	20		10			15					
Early River			10			10					
Easton Cling	60	30	10			50					
Elberta			2500	5000	5000	1000					
Elberta Cling	20	10				50					
Emma	100										
Engles Mammoth	10	10	20			50					
Ethel's Yellow	50	10	10	10		70					
Eureka	20	10	10	20		80					
Fitzgerald	150	50	30	60							
Ford's Lt. White				20	100						
Foster	500	450	115	200	150						
Fox Seedling					600						
Geary's Hold On	600	50			50	100					
Globe		40	210								
Gold Drop	10					40					
Gold Mine	40	10	10	20		60					
Greensboro		20	10		300						
Harrison Cling	150	20	100	200	300						
Holland Cling	40	10	10			25					
Hughes I. X. L.	50	10				75					
Illinois	10					40					
Kalamazoo	5				50	10					
Klondike		10									
Krummel's Oct	20				1500						
Lee's Cling	40	10				50					
Lemon Free	40					25					
Levy's Late	100	20	50		90	150					
Lodge	20	10				20					
Lorentz	25	20	10	10	10	130					
Lowell	70		10			20					
Lyndon Cling	10	40	10			90					
Mamie Ross					150						
Marshall						40					
Mayflower	120	10	80	75	20	220					
Moore's Favorite	500					800					
Mt. Rose	60				50						
Muir	10	10				10					
Newington Cling	50	10				90					
New Prolific	350	100	175		100	10					
Niagara		20	40		230						
Nina Cling	30	40	10			90					
Old Mixon Free	25	25	20		5	200					
Old Mixon Cling	30	40	10			25					
Picquet's Late	100	20	100	10		20					
Preston Cling	60	40	15			160					
Prize		10	10	10							
Ray					500						
Red Bird	30	6	4			60					
Salway	500	400	120	110	700	400					
Sea Eagle			10			50					
Slappey	250										
Snow Orange	30	50				110					
Stephen's R. R.			40		1800						
Stinson's Oct	5		10			50					
Stonewall Jackson	10		10			100					
Stump	15	15		1150	2500	50					
Sunrise Cling	80	30	20	10	5	150					

Harrison's Nurseries
J. G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.



THE NATIONAL NURSERYMAN



JULY, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.

MONROE, MICH.

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SPIRAEA VAN HOUTTEI
by the thousand.

Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

APPLE AND JAPAN PEAR SEEDLINGS

We are ready to quote prices for future delivery.

*Large line of General Nursery Stock of superior
quality for Wholesale Trade.*

CORRESPONDENCE AND INSPECTION INVITED

THE JEWELL NURSERY CO.

LAKE CITY, MINNESOTA

Established 1868

1500 Acres

Write us for GENUINE BARGAIN PRICE on

NORWAY AND CAROLINA POPLAR

6 to 8 feet and 8 to 10 feet

COTTONWOOD, 6 to 8 feet

McINTOSH, JONATHAN, ROME BEAUTY
AND WINESAP APPLE

Now is the time to place your orders for
Direct Importations

from European Nursery Centers

FRENCH FRUIT STOCKS

Apple, Pear, Myrobolan, Mahaleb, Maz-
 zard Seedlings, Manetti, Multiflora and
 Quince stocks. Also full line of Orna-
 mental for lining out, from Vincent Le-
 breton's Nurseries, Angers. Best pack-
 ing and grading. December or February
 shipment from France.

Boskoop, Holland, Nursery Stock

Boxwood (pyramids, bushes, standards,
 ball-shape, etc). Roses, Tree Roses, Rho-
 dodendrons, Azaleas, Magnolias, Koster
 Blue Spruce, Evergreens, Hydrangea P.
 G., etc., etc., from Schaum & Van Tol,
 Boskoop.

DECIDUOUS TREES

Norway and Schwedler Maples, Tili-
 as, Elms, Chestnuts, Oaks, Planes, Thorns,
 etc., etc., etc., straight stems and good roots,
 careful selection, best packing from Union
 Nurseries, Oudenbosch, Holland.

Besides representing the above firms
 as Sole American Agents, we import to
 order

FROM JAPAN AND ENGLAND

English Manetti, Gooseberries 2 and 3-yr.
 (Whinham Industry, Whitesmith, etc.),
 Japanese Nursery Stock and Lilies.

BAY TREES. Standards, Pyramids and
 all shapes from Belgium, Fall or Spring
 shipment.

RAFFIA. Red Star Brand and four
 other grades; also dyed Raffia in 20 colors.

WRITE US for catalogs, special lists,
 etc., stating the class of stock you are
 interested in.

SHIPPING. We have our own Custom
 House Dept., with shipping connections
 at Havre, Hamburg, Rotterdam, Antwerp,
 Southampton, etc.

McHutchison & Co.

17 Murray St.
 New York

The Import
 House

SIMPSON

is the name of the men who grow the finest

CHERRY

that can be produced by suitable soil, climate and
 expert knowledge.

Take a look at the stock or ask for a sample and
 be convinced of the extra quality of their

TREES

CHERRY—3-yr., 2 inch up, 7 to 9 feet, for high-
 class retail trade

APPLE—1 year and 2 year.

H.M. Simpson & Sons

VINCENNES, INDIANA

For Winter and Spring Orders

**WE OFFER THE FOLLOWING FROM
 OUR MAC CLENNEY NURSERY . . .**

- 4000 **Mulberries**, mostly of Hicks variety, smooth and free
 from blight.
- 15000 **Figs**, mostly of the Celeste and Lemon varieties.
- 20000 **Peach**, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.
- 25000 **Plum on Plum**, Abundance, Burbank, Wickson, Red
 June, Gonzalez, and other leading sorts. Sizes $\frac{1}{2}$, $\frac{5}{8}$,
 $\frac{3}{4}$ and 1 inch.
- 10000 **Roses**, Teas, Hybrid Teas and Climbers, all grafted very
 low on Manetti roots. Field grown.
- 6000 **Biota Aurea Nana**, sizes 18 inches up.
- 10000 **Biotas and other Conifers**, 12 inches and up. Conifers
 can be balled or shipped with naked roots.
- 25000 **Chinese Arborvitae Seedlings**, 2 and 3 year, 6 inch to
 3 ft. sizes.
- 5000 **Muscadine Grapes**.
- 20000 **Trellis Varieties Grapes**.
- 70000 **Camphor Trees**, sizes 1 to 3 ft.
- 3000 **Pot Grown Eucalyptus**, sizes 3 to 5 ft.
- 4000 **Oriental Plane**, sizes from 4 to 12 feet.
- 3000 **Texas Umbrella**, sizes from 4 to 8 feet.
- 2000 **Oleander**. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.
 Could also supply limited quantities of general list of Fruit
 and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

The Griffing Brothers Company
 JACKSONVILLE, FLORIDA

NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the
United States at the

PAINESVILLE NURSERIES

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens,
Hardy Roses, Vines and Plants, Grapes, Gooseberries,
Small Fruits, Bulbs, Seeds, Palms and other
tender Greenhouse Plants

Have a large stock stored in frost-proof cellars that can be shipped
at any time desired; switch from N. Y. C. lines direct into
our packing house; can load without exposure.

Unsurpassed facilities for handling
orders large or small

== CATALOGS AND PRICE LISTS FREE ==

A FEW SPECIALS WHILE THEY LAST:

STANDARD PEARS in assortment

DUCHESSE DWARF PEARS

BOURGEAT QUINCE

PRUNUS PISSARDI and **TRILOBA**

CUTHBERT and other **RASPBERRIES**

CONCORD and other **GRAPES**

OUR SPECIALTIES ARE:

Roses, H. P. Moss, Ramblers, Climbers, etc.,
Peaches, Pears, Plums, Cherries, Ornamental
Trees and Shrubs in car lots, Weeping Mulberries,
Elm and Ash, Clematis, Ampelopsis, Paeonies,
Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

FOR FALL, 1912

AMERICAN

ELMS...

Norway Maples

SPLENDID TREES

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

AND NOW,—

When you are thru your packing, and your planting is under way, and you can find time to look around and revise the plate-book for the 1912 campaign, write us about the J. & P. SPECIALTIES and good things in ROSES, new and old, CLEMATIS, and shrubs like TREE HYDRANGEAS, TREE LILACS, AMPELOPSIS, etc. Of some things we have a rather larger stock than usual for 1912-1913 season, and we think we could be induced to make very attractive prices on some early orders.

Now is the time to buy FERTILIZER SOWERS. We sell good ones. And BUDDING KNIVES and RAFFIA.

When you are buying, *no matter what*, send an inquiry to the J. & P. people. Costs a stamp; sometimes saves a lot.

JACKSON & PERKINS COMPANY

"Grow specialties—Sell everything."

Distributors of the "Preferred Stock"

Grown at NEWARK, which is in Wayne County,
NEW YORK STATE.

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—Aurea Nana, Aurea Conspicua, and Japonica Filiformis (see illustration); Retinospora, Thuya, and Juniper—all in popular sizes for the trade.

Our Deciduous Shrubs include Exochorda, Lilac, Spirea, Althaea, Deutzia, Philadelphus, and a very choice stock of Teas' Weeping Mulberry.

Broad-leaved Evergreens—Azalea Indica (Home-grown Plants) Magnolia Fuscata, Aucuba, Ligustrum, and English Laurel. Among our fruits, we direct particular attention to our clean, thrifty Peach Trees, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.
INCORPORATED

Fruitland Nurseries
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.

CONIFERS
BROAD-LEAVED
EVERGREENS
DECIDUOUS
SHRUBS
WEEPING
MULBERRY
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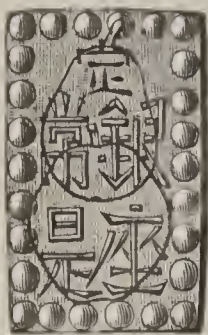
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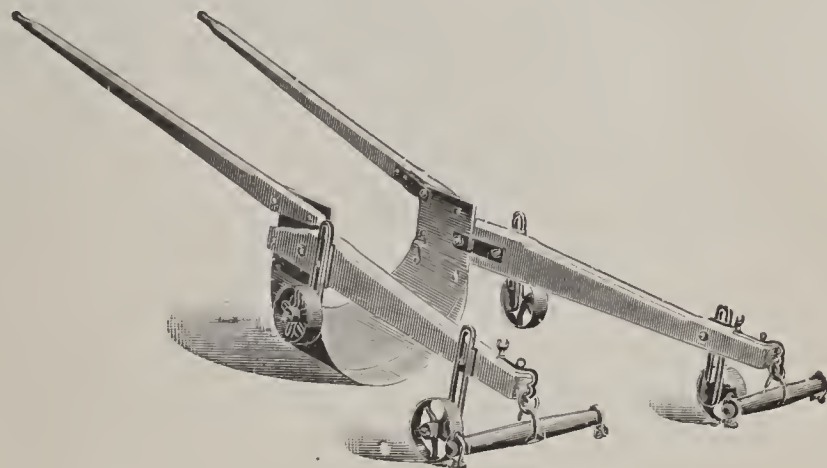
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The National Nurseryman

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The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., JULY, 1912

No. 7

AMERICAN ASSOCIATION OF NURSERYMEN

The Boston Meeting Enjoyable to a Degree. Portland the Next Place of Meeting. Thomas B. Meehan Elected President

(Special Stenographic Report Provided by the National Nurseryman)

The thirty-seventh annual convention of the American Association of Nurserymen, which has just passed into history, was, if not the largest convention ever held, at least one of the most enjoyable. It broke no records for the amount of business transacted, papers presented, nor discussions indulged in. On the other hand, it was a mighty good natured, well pleased crowd of men and women who drifted away from Boston following the close of the third day. The weather, a delightful contrast to the conditions which have prevailed in some of the recent meetings, was cool to a degree. The hotel facilities were satisfactory, and the entertainment provided by Chairman Manning and his worthy assistants represented a high grade of New England hospitality.

The members of the convention arrived by train, by trolley, and by automobile. Several parties came in their own cars, and had the enjoyment of these during the session. Prominent among these were: President-elect Thomas B. Meehan, wife, son and daughter, Messrs. Pitkin and Eddie Osborne of Rochester, John B. Morey and Mrs. Morey of Dansville, Harlan P. Kelsey and Mrs. Kelsey of Salem, and others.

SPECIAL CAR FROM ROCHESTER

Treasurer Yates, as has been his custom for a number of years, chaperoned a special car composed of the following: Messrs. McCarthur and son, Charles Perkins, Kelly, C. Weeks, Bennett, Uhl, Frank Weber, J. P. Rice, John Hall, F. M. Hartman, Bailey, Vredenberg and wife, M. H. Green, Joseph Charlton, H. Hooker, Theo. Smith, T. Brown, and M. B. Fox.

The members of this car report the usual good time.

THE SESSIONS

The sessions ran off smoothly and rapidly under the precise and efficient management of President Dayton.

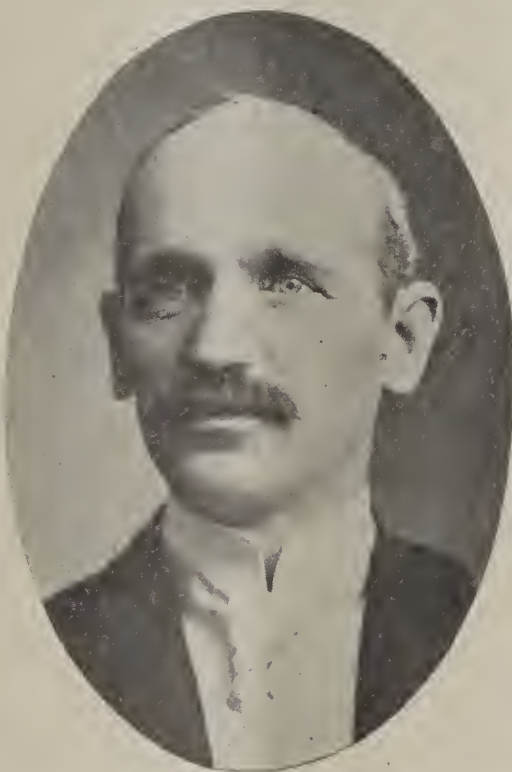
There were fewer papers, less discussion on subjects aside from matters arising out of committee reports at this convention than almost any other in recent years. The report which easily led all others in importance was that presented by Mr. William Pitkin on legislation. While this was designated legislation east of the Mississippi, it was in effect a report of the Association's committee in its efforts to meet the views of the officers of the Department of Agriculture at

Washington in preparing a bill to cover the federal inspection of nursery stock. Mr. Pitkin reported progress on this bill at the St. Louis meeting, and was instructed by the Association to continue his good work, assisted by western representatives, including Mr. Peter Youngers and representatives of the Western Wholesale Association. The report of Mr. Pitkin presented at this meeting recited the present status of the bill, which showed that, as it now stands, the leading provision is one providing for the quarantine of foreign or domestic nursery regions when these are found to be infested with injurious pests. Strong exception was taken to this measure by individual members, and an effort was made to secure a proviso that no region should be quarantined without giving a sixty day notice. The committee, however, felt that it was unwise to lay down rigid provisions of this kind, and the matter was left open and in the

hands of the committee.

PORTLAND SELECTED

The next place of meeting will be Portland, Oregon. This is a far cry from Boston, but it seemed to be the temper of the convention that the vigorous efforts of the active representatives of the Pacific Coast, Messrs. J. B. Pilkington and P. A. Dix, should be rewarded; and so it was. The meeting will be held in Portland, but the time of convening was referred to the Executive Committee with power. It



THOMAS B. MEEHAN
President

was felt that the date fixed by the constitution would prove too early for eastern members.

The address of the President was a brief but pointed document, calling attention to the pending federal inspection bill, the necessity of nurserymen standing together on the question of prices, and upon the other important question of standardization of grades. Mr. Dayton also spoke a strong word for the dignity of the nurserymen's profession and the necessity of each member doing his share to maintain that standing which it rightly deserved.

The Secretary's report called attention to the *ad interim* publication of the report of the Committee on Standardization of Grades. Mr. Hall showed that continuous effort was necessary, in order to keep up membership, and while a considerable number of new members were enrolled during the year, the total membership was somewhat less than in

and up to the present time, including the metropolitan park system, we have spent over thirty million dollars in beautifying the city and its suburbs. We think, taking it all in all, that it is unequalled in this country.

I would bring to your notice the lack of attention that is paid by the American people generally to the proper cultivation of the soil. When we have a situation such as exists in this country at the present time, with the cost of food products having increased twenty per cent. within a year, and statistics showing practically no increase in the acreage devoted to farm products in the United States since 1900, it shows necessity for an educating process to be carried on in our schools. Think of the immense waste of the soil, the hundreds of thousands of acres here in New England that could have been devoted to the growing of potatoes, yet this commodity has been at prohibitive prices during the past two



Seated, left to right: T. J. Smith, New York; W. F. Ilgenfritz, Michigan; George A. Marshall, Nebraska; W. P. Stark, Missouri; Orlando Harrison, Maryland; C. M. Peters, Maryland. Standing, first row: S. W. Crowell, Mississippi; H. H. Hooker, New York; A. L. Lake, Iowa; H. M. Simpson, Indiana; T. J. Rice, New York; E. A. Anderson, Kansas; John Charlton, New York; C. A. Bennet, New Jersey; James M. Irvine, Missouri. Second row, standing: J. Frank Darrow, New York; F. T. Ramsey, Texas; W. T. Stark, Missouri; J. A. Bailey, New York; James Kelly, New York. Back row, standing: L. C. Stark, Missouri; C. L. Yates, New York; Thomas Welch, New York; M. B. Fox, New York; B. J. Vandervent, Illinois. (Courtesy *Christian Science Monitor*).

the year 1911. The Secretary's report feelingly called attention to the passing of several honored members during the year. The latest of these was Mr. J. J. Harrison, the father of Storrs & Harrison, Painesville, Ohio, whose obituary appears in another page of this issue.

The Treasurer's report showed the finances of the convention to be in a healthy condition.

ADDRESS OF WELCOME BY MAYOR FITZGERALD OF BOSTON

I am here to officially welcome you, though I think you have seen the welcome of the citizens of the city, because I think the local committee has been energetic in organizing a program which has been a very pleasant one. I know with the many attractions of our beautiful city that you will go away from here with the idea that we have one of the most beautiful cities in the world.

I think that this organization appreciates what Boston has done in establishing parks and boulevards, and in its public grounds department during the past twenty-five years. I think we can claim without successful dispute that we led the cities of America. We began our park system in 1885,

months. It seems to me something is radically wrong with the American mind. Some attention must be paid to an increased use of the soil. Population in this country tends towards the cities, so that it is difficult to get farm labor. The farmer has been made to appear ludicrous on the stage. That is something I think your organization could take up. If the farmer's life is going to appeal to boys, it ought to be made as attractive as possible.

In the metropolitan district in Boston, I have favored legislation calling for the organization of an agricultural school in the district. I am discussing the advisability of establishing a farm school on practical lines right here within a mile of this hotel, where two or three hundred boys can be schooled for two or three hours, than taken out on the farm and taught the elements of farming, to see if they cannot be induced to like that sort of business.

There is a vast difference between this country and Europe in that direction. The population of Germany is 300 to the square mile, compared to our 30. It isn't strange they have intensive cultivation there. Belgium, the most populous country in the world, has two, three, and four crops a year.

We can increase the love for cultivation of the soil. Organizations like yours can accomplish a great deal in each of the different sections of the country. Go to the newspapers and ask them to devote a page Sundays to subjects connected with the cultivation of the soil. Go to the school committee, and ask them to take up the subject in a practical way. Go to the stage managers, and have them put the pleasant side of farm life to the front. There will be an opportunity for reform of the American mind that will make boys wish to become practical farmers.

Mr. J. Woodward Manning responded briefly and appropriately.

THE PRESIDENT'S ADDRESS

J. H. DAYTON, Painesville, O.

For thirty-six years the Nurserymen of the United States have duly assembled in their annual convention.

It is not my purpose to recount the results or try to list the many good things accomplished, but as we meet for our thirty-seventh annual conclave, to express my hope that it will not only be the largest in numbers, the best in entertainment, but in practical results that will send us home to increase the earning capacity of our business, it will stand at the head.

It would be easy to devote this address to telling you what good fellows you are, and how your wives have picked the best men in the world, or the advances made in methods, or the better ideas that are gaining ground among us, but it is easier to knock, and there are still some things that may be improved.

When his Satanic Majesty climbed the tree to pluck the golden fruit, with which to dazzle and debase the first nursery firm, he certainly grafted or cross-fertilized, or pedigreed, or bud varied to such good purpose, that the Devil and a whole brood of snakes have remained to plague the tree and the grower ever since.

Believe I am an optimist and think we have beyond any question one of the grandest and best businesses in the world, capable under proper management of giving rich financial rewards; a business that should be recognized by all as one of the most important, but which, caused largely by our own lack of faith, of coöperation, of the application of business principles, does not so stand, either in our own eyes, or the eyes of the business men of the world.

With thirty-six years of united effort behind us, with the richest country in the world for our habitation, with a prospect of the greatest development the world has ever known, both in the production of fruits and the use of ornamentals for the beautifying of public and private grounds it seems to me it is time, that when we produce a first-class healthy tree or shrub, true to name, carefully and properly pack and deliver it to the transportation company or planter in good condition, at an agreed price, that it be definitely understood it belongs to the purchaser, and that under no circumstances are we liable for its growth or in any way bound to replace, refund or make good in case the tree does not succeed in its new home.

It's time we know what a tree of any grade or size in salable condition is worth, and sell it for its full value, and that its value if properly handled is the same to the planter the first day of May as the first day of April.

It's time we priced our lists at fair prices for honest stock, taking into consideration our risks and surplus and then adhere to our prices. What other business issues expensive price lists and then proceeds to cut rates to every inquirer? Why should we have any standing among the business men in the country, when not only the large but practically every small buyer of any experience has found that by sending out a few inquiries he can get prices below printed rates?

It's time we realized that the nurseryman is no exception to the rule "that man cannot live to himself," that bad business practice on part of one injures all. As a body we should place our condemnation on any practice that tends to bring discredit, any departure from honest business dealings, any method of dishonest advertising, in press or catalog. In fact, show the millions of honest consumers that we are trying to eliminate from our own ranks by all means in our power everyone who is not trying to give a square deal.

It's time we learned when we have produced a surplus, as we will on some items every year, that the place for it is the brush pile, instead of seeking by cut prices, surplus lists, etc., to demoralize our market, not only for that season, but for years to come.

It's time we reorganized our credit departments and stopped taking chances on doubtful accounts, because it is the rush season, and we have no time to look the customers up, or because we have the stock and may not have another chance to sell it.

Why recapitulate the breed of snakes? We all know them, we lament their presence every year, and every time a few of us happen to meet, we know the deadliness of their poison fangs and we really think we could eliminate them from our business, if the other fellow would from his.

Is it not time we had earnest, whole-souled, enthusiastic coöperation, with faith and trust in one another, and in our officers and committees and backed them and each other up in all efforts to eliminate the bad, elevate the good, to introduce new and better methods, to present a solid front against all threatening ills, and for all that tends to improve?

Time of meeting. This perennial question needs settling. Think every nurseryman of the North and East realizes more than ever this last season, that the second week in June is too early for our meeting. At last year's convention, you instructed your President to appoint a special committee to consider the matter, in coöperation with the State Vice-Presidents and report at this meeting. Regret to have to state that amongst my other short comings, these instructions were overlooked and no committee has been appointed. I recommend the appointment of such a committee, and the election of a president who will attend to business.

Your officers and committee reports will advise as to the work and standing of matters which they have in charge. My sincere thanks are due the chairmen and members of the different committees, who have accomplished a great deal of efficient work. Your Legislative Committee chairman has had the time of his life and knows all the joys of a prolonged flight betwixt the devil and the deep blue sea. Unquestionably in spite of the action taken at our last convention, the nurserymen stand today, if not endorsing as a whole, at least as not opposing a quarantine law for all foreign countries and

domestic quarantine for any "new or not theretofore widely prevalent dangerous insect or disease." It is possible it may become a law at this session of Congress. What amendments may be offered or adopted, we know not, but knowing something about the hearings before the committee, and the influences being brought to bear, consider it practically certain that the law when passed, or if not then, will soon be amended leaving out "new or not theretofore widely prevalent," and placing domestic quarantine on same basis as foreign. This bill may come before the house at any time now, and definite instructions should be given your Legislative Committee as to their action.

It is with a good deal of pleasure I note the formation of and the active interest taken in state and sectional organizations of nurserymen; may the work continue until every state has a live organization. Let us remember, that this Association is the National one, and unless we work in harmony many of our efforts will be love's labor lost. When two organizations of nurserymen ask for or work for different things, they get nothing or worse.

One of the most important things, in my judgment, that this convention could accomplish, would be the preparation of a satisfactory state inspection law, and the enlisting of the resources of all our Associations, National, Sectional and State, in an effort to induce every state legislature to pass a uniform law.

Remember, that in addition to all former reasons for such laws, that a National Quarantine Law is assured, that it is of supreme importance that not only yours and your neighboring nurserymen's premises must be clean, but that it will be necessary for the state to keep or force the owners of orchards and private premises to keep theirs clean.

We are told that automobiles, lunch baskets, outer garments, in fact almost anything passing through certain sections may carry dangerous insects to another state or section, which may develop to such proportions, that that section or even the entire state may be quarantined and the shipment of nursery stock prohibited. Under such circumstances, it seems to me imperative not only that we impress on every grower of stock the necessity for eternal vigilance, but also that it is up to him by every means in his power, individually and collectively, to help secure such legislation as will enable his state not only to inspect but to destroy all infested stock. Our body ought to be able to help formulate, pass and enforce such laws and they should be practically uniform in every state.

I recommend to your careful perusal once more the able statesmanlike address presented for your consideration last year. Another year has simply added to the golden opportunities all about us, to the demand for better nursery products and more of them, to the better education of the buying public, as to what they want and how and why they want it.

It is certainly up to us as American Nurserymen to keep abreast of the times, to establish our business on an advanced footing that will compare in every way with the up to date practices in other lines, to have business acumen enough in matters of policy, legislation, etc., to decide on what is best for our trade, and unitedly work for the greatest good to the greatest number.

SECRETARY'S REPORT

JOHN HALL, Rochester, N. Y.

To the Members of the American Association of Nurserymen:

With the return of the second week in the month of leaves and roses your Secretary presents to you his report of the doings of his department during the past year. By way of preface, we cannot resist saying that we feel that you gentlemen who contribute so much to the embellishment of various landscapes and home grounds of the United States are doubtless glad of this opportunity to free yourselves from business cares, and welcome this respite from the experiences of the packing season, and that you doubly welcome this occasion for the renewal of each other's fellowship. I believe that in this Boston convention you will find the conditions very favorable for a genuine good time under the hospitable direction of the local entertainment committee.

At the last annual meeting, your Secretary was instructed to print the report of the Committee on Legislation East of the Mississippi, and this was done under the direction of the Chairman. A committee was appointed to prepare a standard list of grades. This committee, of which E. P. Bernardin was chairman, has completed its work and reported to the Secretary.

The instructions given at the time of the appointment of the committee, namely, that its report be published in the trade journals, was obeyed by the Committee. We have again to comment upon the work connected with the membership list. In his efforts not only to maintain the normal numerical strength, but to increase the numbers, your Secretary has been at great pains; but though we have forty new members, the present registration falls short of that of last year. The universal testimony is that the season has been almost without a parallel for unfavorable conditions, and we have felt that there might be some justification for the apparent neglect of the Secretary's importunities for renewals. We expect to see at this meeting a registration that will exceed that of 1911. One encouraging feature is that the cash received will exceed the receipts of last year, from present indications.

Mr. Hall then presented the fiscal report for the period from October, 1911, to June 3, 1912, showing receipts to the amount of \$2,747.70. The Secretary had passed over to the Treasurer \$2,427.00, leaving in the Secretary's hands \$63.75.



MAYOR FITZGERALD OF BOSTON

The Secretary then continued as follows:

NECROLOGY

The presence of death in our ranks has again removed a number of our valued members.

September 5, 1911, there died a veteran in the nursery business in the person of Mr. Lewis Chasc. head of Chase Brothers Company of Rochester. He was a pioneer in the trade, one of those quiet, modest characters who command success by their unimpeachable integrity and untiring devotion to business. Few would have suspected he was past eighty years old.

August 25, last year, Major W. F. Heikes, founder of the Huntsville Wholesale Nurseries, passed away. He and his family had been visiting in the North and he had occasion to go to Cleveland. While in that city, he was stricken with a sickness which proved fatal.

November 16, 1911, saw the passing of John Siebenthaler, of Dayton, Ohio, at fifty-seven years of age. He was an enthusiast in all that pertained to horticulture. He is succeeded in his business by his sons.

On November 18, 1911, about four months after his wife, William H. Moon, of Morrisville, Pennsylvania, passed away. He was born March 5th, 1849, in a nurseryman's household. He was one of our best growers of ornamentals. THE NATIONAL NURSERYMAN classed him among the pioneers of the business in Pennsylvania, the personification of genial good nature, broadminded and progressive.

Late in 1911 or early in the present year, occurred the death of Norman J. Coleman of St. Louis, who was born in 1827. Members will remember the greeting he gave us at our last meeting. He established the paper that bore his name, and continued for sixty-four years in charge of it. He was the first Secretary of Agriculture to be made a cabinet officer under the late President Cleveland. He was responsible for the establishment of the Division of Pomology with H. E. Van Deman as chief, who characterizes Mr. Coleman as the oldest agricultural editor of the present day, one of the ablest and most useful and faithful of all men who have served American agriculture and horticulture.

William Smith of Geneva, New York, died February 6, 1912, in his ninety-fourth year. In 1846 he established the business of W. & T. Smith Company. He was Geneva's pioneer nurseryman, a philanthropist, and a grand old man, a worthy example for all to follow.

The sad news comes this morning of the death yesterday of one of our charter members, J. J. Harrison of Storrs & Harrison, Painesville, Ohio, at the age of eighty-two years. He was a delightful personality. I am sure that the sym-

thy of this Association will go out toward our President, J. H. Dayton, and other members of the firm of which our deceased member was head.

J. Horace McFarland: It does not seem as if the passing of these seven men, surely fathers in Israel in the nursery trade, should go unnoticed except in the very admirable review of their lives by our Secretary. I move that in respect to the deaths that have visited us the members of the Association at this meeting stand in silence for the space of thirty seconds. (Carried).

The Treasurer's itemized report showed cash on hand June, 1912, to the amount of \$5,974.23. Disbursements for the year amounted to \$2,372.33.

The Secretary's and Treasurer's reports were accepted, and referred to an auditing committee.

The Report of the Committee on Transportation followed. This was read by the Secretary in the absence of Mr. Sizemore and Mr. Lake. It appears in the present issue and covers a thoughtful consideration of the whole field.

REPORT OF TREASURER

1911		RECEIPTS	
June 6	Cash on hand.....	\$5,367	77
Oct. 17	Received of John Hall....	256	95
June 6	Received of John Hall....	2,427	00
June 6	Interest to May 31st, 1912	211	09
June 29	Deposited, credited to acct. by error.....	83	75
		<hr/> \$8,346 56	

DISBURSEMENTS

1911			
June 24	The Du Bois Press, 600 copies Badge Book, etc.....	\$303	98
	Winter & Schrader, printing..	6	50
	E. A. Smith, postage, mailing, etc.....	12	25
	John Hall, postals, postage, etc.....	16	16
	John Hall, salary.....	500	00
July 5	C. L. Yates, salary and post- age.....	50	80
July 27	Emma Jacobson, expenses to St. Louis.....	66	20
	The Whitehead Hoag Co., badges.....	23	65
	John Hall, telegrams, postage, etc.....	6	00
Aug. 11	The Morrison Press, letterheads and envelopes....	27	50
	Stark Bros. for Chas. Sizemore trip W. C. C....	81	95
Sept. 5	Wm. Pitkin, telegrams, circulars, etc.....	6	16
6	Check deposited to wrong acct. and withdrawn..	83	75
12	S. J. Hunter, expense to St. Louis.....	22	85
27	Du Bois Press, annual report, etc.....	285	54
	John Hall, telegrams, etc.....	22	35
Oct. 13	J. W. Schuette, exhibit expense.....	7	40
	United Litho. & Printing Co., letter heads.....	8	50
	Winter & Schrader, envelopes.....	1	40
20	Peter Youngers, legal opinion, Mont. Laws.....	25	00
Nov. 7	McGuire & Wood, Attys.....	138	54
Mch. 29	Peter Youngers, legal opinion, Wyo. Laws.....	105	00
Nov. 9	John Hall, stamps and env.....	33	71
	Du Bois Press.....	22	75
	Davis & Steel Co.....	2	00
Jan. 30	W. C. Reed, expense on transportation committee	40	00
Feb. 3	M. E. Wolff Co., Bond for Treasurer.....	10	00



C. L. YATES
Treasurer

Mch. 23	J. M. Pitkin, Washington, D. C., trip	\$ 43 56
	J. H. Dayton, Washington, D. C., trip	64 50
	Wm. Pitkin, Washington, D. C., trip	176 38
	John Hall, letterheads, etc.	8 00
April 1	John Hall, trip to Boston	29 62
May 10	John Hall, envelopes, cards, etc.	22 13
	Davis Steel Co., printing	1 25
	Winter Schroeder	6 10
15	United Litho. & Printing Co.	11 30
10	United Litho. & Printing Co.	1 35
18	T. B. Meehan, Washington, D. C., trip	28 00
	Peter Youngers, Wyo., suit and attys.	70 00
		\$2,372 33
June 6 1912	Cash on hand	5,974 23
		\$8,346 56

All of which is respectfully submitted,

C. L. YATES, *Treasurer*.

REPORT OF COMMITTEE ON CO-OPERATION WITH ENTOMOLOGISTS

Chairman, L. A. BERCKMANS

The entomologists and the nurserymen should be on the most friendly terms. It is to the interest of all parties that all differences be wiped out. Within the past year the entomologists and the nurserymen have been drawn closer together than ever before. Conferences have been the means of establishing better understanding. It is the duty of the entomological department to prevent the entrance of injurious insects and dangerous fungous diseases, and to stand ready to come to the assistance of the fruit grower and nurseryman and farmer when threatened with invasions. Some of the officers are incompetent. These men have caused the whole entomological department to be unjustly criticized. I would most earnestly urge the continuance of all committees on legislation and coöperation with entomologists. The interests of the country demand closer coöperation than ever before. We are all working to the same end. I believe the entomologists realize that it is not the almighty dollar alone the nurserymen are seeking. We want to conserve the interests of the people of our own state and nation.

The San José scale was not considered a pest in China, but it came here without its natural enemies and developed into the worst enemy our fruit has ever known. If the national quarantine bill becomes a law, there may be amendments offered that should be watched from time to time, and the entomologists and nurserymen should stick close together.

APPOINTMENT OF COMMITTEES

The President appointed committees as follows:

Committee on Resolutions: J. W. Hill, Iowa; John C. Chase, New Hampshire; L. A. Berckmans, Georgia.

Auditing Committee: John Watson, New York; W. C. Reed, Indiana; W. L. Hart, New York.



W. P. STARK
Chairman Committee on Publicity and Trade Opportunities

President Dayton: I think we had better call the attention of the meeting to the fact that the vice-presidents must report tomorrow at nine o'clock. It will be necessary for the representatives of every state to hold a meeting and see that vice-presidents are selected.

Mr. Watson: I move that the Committee of Vice-Presidents be a committee to confine their reports to other matters than those relating to the election of officers and the recommendations of place of meeting, and that those matters be taken up directly from the floor.

Colonel Watrous: That is a very radical change that is proposed. I think I have been at the meetings of this society pretty nearly from the beginning, and my understanding has always been that the province of the vice-presidents was to recommend officers and place of meeting as a basis for the work of the convention. It is a very radical innovation, and I don't know what vice-presidents are for if it is not to make those two recommendations which they have always made.

Mr. Watson: I don't want to propose anything radical. We have regularly, year after year, seen those recommendations changed from the floor. If the Association prefers to make an expression of its own, it ought to. Possibly we could have nominations from the floor.

Secretary Hall: The by-laws say it shall be the duty of the vice-presidents to look after and promote the interests of the Society in their respective states. (Motion not carried).

Thursday Morning, June 13, 1912

The first order of business was the presentation of the report on the Standardization of Grades by Chairman E. P. Bernardin.

It will be remembered that this report was presented to the American Association of Nurserymen as an *ad interim* report by Mr. Bernardin several months ago. It was published in full in THE NATIONAL NURSERYMAN, February, 1912. On motion of Mr. Youngers the report was received and its recommendations adopted.

REPORT OF THE COMMITTEE ON PUBLICITY AND TRADE OPPORTUNITIES

Presented by Chairman W. P. STARK

Your Committee has been handicapped in its work by a number of complications, principal among which has been lack of funds for the prosecution of its work. It was the intention of the mover of the resolution which led to the appointment of this Committee that the Association provide funds for the outlay required by its investigations. Through his failure properly to word the resolution, however, this was not understood at the time of its adoption. Notwithstanding the conditions which have hampered its work, the Committee has

gone into the matter to a sufficient degree to make it clear to its members that there exist magnificent opportunities for the expansion of the nursery trade and that the degree to which these opportunities will be realized upon by the members of the Association depends very largely upon the publicity methods that will be adopted and put into execution during the next few years.

It has been made evident to the members of the Committee through the investigations they have conducted that a serious crisis will very shortly confront the trade, unless radical steps are taken to place it before the people of the country in its proper light. It is equally clear to the committee members that such steps may be taken as will render the publicity of every advertising nurseryman more productive of results than it has ever been and insure a volume of business in proportion to selling expenses altogether out of proportion to that which now obtains.

While convinced of the accuracy of these statements, the Committee does not feel that it would be justified in definitely outlining a plan of procedure at this time. On the other hand, its members are unanimous in the belief that the investigations of the past year should be carried forward and a very much more complete analysis made of the situation before a definite line of endeavor is agreed upon.

It is earnestly recommended, therefore, that a committee of seven members on Publicity and Trade Opportunities be continued for the following year, with instructions to prosecute further inquiry into trade opportunities and methods of publicity, summarizing the results of its labors and presenting them in the forms of bulletins to the members of the Association from time to time at its discretion, and offering to the next annual Convention a complete report including a definite plan for associated advertising effort on the part of the nursery interests should the Committee consider such effort practicable and desirable. It is further recommended that this Committee be appropriated for its necessary expenses, by the Association at this time, a sum of money equal to the amount placed at the disposal of the Publicity Committee two years ago, but never expended.

In making these recommendations the members of the Committee feel assured that, regardless of the value of the final report of the Committee, the results of its investigations, as they are placed before the members of the Association in the bulletin form, will constitute a service of very considerable importance and usefulness. The work of the past year has placed in the possession of the retiring Committee some very vital facts as to the relative efficiency of various forms of publicity, and advertising effort, and when these are properly checked and presented to the members of the Association, they will almost certainly possess, to a notable degree, interest and value. It is believed that the Committee will be able to develop and present trade opportunities not now apparent to most nurserymen which will also render its work well worth while.

President Dayton: This report covers one of the advance steps that nurserymen should take. It well merits our earnest consideration. What will you do with the report as presented?

Mr. Hill: I think the most of us do not realize the importance of this committee, and my recollection is that heretofore we have been changing committees each year. I think in this respect we have made a mistake. I believe the present committee should be reappointed. These men have already taken steps and made investigations which will prove valuable to the Association. I wish to move the acceptance of this report, and with it the recommendation regarding the increase of the committee to seven, with a suggestion to the incoming president that the gentlemen serving on this committee last year be reappointed with the desired increase to seven members. (Motion seconded by Mr. Berckmans).

Professor Craig: It seems to me the Chairman of the committee has struck the key-note when he says in the first place that the situation is one which demands study. In the second place, he has hit an important point when he suggested that this problem cannot be attacked in a small way. It would be very easy for this Association to fritter away a considerable amount of money, paid out in small sums. In my judgment the thing we need to have before us is a definite program which can be worked to, and which is comprehensive. This Association is able to carry out such a program.

Mr. Hill's motion was amended to appropriate \$500 for this committee for the coming year. (Motion carried as amended).



WILLIAM PITKIN

DIGEST OF REPORT OF COMMITTEE ON LEGISLATION EAST OF MISSISSIPPI RIVER

By WM. PITKIN, Chairman

The most important matter that has been considered by this committee during the past four years is the proposed legislation affecting the importation of foreign nursery stock, and at the 1911 Convention a full report was made covering the situation up to that time. After the discussion, a resolution was adopted which in substance approved the course of this committee in connection with federal legislation, and further conferred on the committee full power and authority to act during the coming year in matters of federal legislation, with the suggestion that the Association favored federal inspection of foreign nursery stock on safe, sane and practical lines, and instructed the committee to use the strongest efforts to defeat legislation which would place large power in the hands of bureau chiefs.

Following the action taken at St. Louis, your chairman filed with the Department of Agriculture a copy of the resolution. Later he had considerable correspondence with Dr. Howard and his assistant, Mr. Marlatt, and further secured from the chairmen of the Committees on Agriculture in both houses their promise that no bills would be

approved by their committees until the nurserymen had had an opportunity for a hearing. The correspondence developed that the main point of difference between the Department and our committee was the question of quarantine, both foreign and domestic.

Matters drifted along until the latter part of December, 1911, when your committee learned that there were to be held in Washington the annual meetings of the entomologists and the Association of Horticultural Inspectors, and that those organizations expected to discuss this same subject. We thought it best to be on the ground, and Mr. Irving Rouse of Rochester and myself went to Washington, and there met Mr. Stark and Professor Hunter, representing the Western Wholesale Association, and Mr. Wyman, representing the Massachusetts Nurserymen's Association. A number of conferences were held with the committees of the entomologists, and a good many informal discussions took place at the hotel. We found, as we had before, that the quarantine question on both imported and domestic stock was going to be sticking point. Our committee had consistently and steadily taken the position that it favored federal inspection of imported stock on the right lines, but that we were absolutely opposed to quarantine legislation. The discussions and conferences at Washington developed the fact that the opinions of the nurserymen on the quarantine question were not absolutely unanimous, indicating a division of the nurserymen and therefore a weakening of our forces, thus adding additional strength to the arguments of the Department officials.

QUARANTINE IN RESPECT TO NEW ENEMIES

The committee finally decided to stand for the quarantine provisions, because we found that we had to, provided they were limited to insects and diseases *new* to the United States. The Department officials had previously made the remark that they thought they could take care of the troubles then existing, but that they wanted some law that would enable them to meet the new troubles as they came up. We then made the suggestion that if they would limit quarantine provisions to new insects and diseases, we would stand for it. That was agreed to. The previous bill was also amended by providing for the appointment of a federal horticultural board of five members, with the idea that we would perhaps be safer in the hands of five men than in the hands of one official in Washington. That suggestion came from Professor Hunter and Mr. Stark, and as they presented it, it called for a board of seven, two of which should be nurserymen, two fruit growers, two horticultural inspectors, and the chief of the Bureau of Entomology. We couldn't get much encouragement on the proposition that would take out of the hands of the Department of Agriculture the administration of the law. They finally were willing to consent to this board, but insisted that it must be made up from the Department; and it was finally put in the bill that the board should consist of five members from the Bureaus of Entomology, of Plant Industry, and Forest Service.

We were also able to secure at this time an agreement which provided that before any radical action was taken by

this board or by the secretary, notice was to be given to the proper official of the nurserymen's association, or any other association interested, and opportunity be given for a full hearing before this horticultural board. So that in a measure would prevent hasty decisions. This was the substance of the agreement that was reached verbally, and the matter was left with Mr. Marlatt of the Department, with the understanding that the legal officer of his department was to draft a bill embodying this, to be submitted to our committee before action was taken. Unfortunately, there was a little misunderstanding, and the bill was printed and introduced before it was sent to our committee. It did not limit the quarantine provision to new insects and diseases. We had considerable correspondence with Mr. Marlatt, most of the differences were straightened out without any difficulty, and finally, an agreement was reached in accordance with the verbal agreement of December.

On February 19th a hearing was granted by the House Committee on Agriculture, at which our committee was represented by the chairman and Messrs. Dayton, J. M. Pitkin, and Thomas B. Meehan. Mr. Marlatt presented the bill as agreed on, and asked its favorable consideration by the committee. There were also present at that hearing a Congressman from California, and representatives from California fruit interests. We had a pretty lively hearing. The section limiting the quarantine provisions to new insects and diseases was strongly scored by the Californians, who said that they were just as anxious to avoid old troubles as new; for there were insects in the East that they didn't want in California. They asked for inspection of nursery stock on the docks at the port of entry, and they wanted the most stringent kind of quarantine legislation. They went for us pretty hard, said the nurserymen were selfish, didn't want to do anything except for their own interests, and they weren't going to stand for it. We presented our arguments, but it was evident that the sympathy of the House Committee was with the California people.

After the hearing, our committee got together and went over the whole situation, and made up our minds that if we continued to fight on those lines we would get pretty thoroughly beaten, and get a bill that would be a great deal worse than anything that had yet been considered; and that our best policy was to get together with the Department and agree on something that would suit the Department, so that when this bill was to be administered, they would have a somewhat friendly feeling toward the nurserymen, and be willing to be reasonable and fair so far as they could.

As a sample of the way the California people were handling this matter, a few days later a bill was introduced by a Californian providing for inspection of all nursery stock at port of entry, and limiting the ports of entry through which nursery stock could be admitted to two ports in the United States, and both of those on the line between Mexico and California.

It was thought best to agree with the Department on the bill which they wanted and in the shape that they wanted it, rather than to continue to fight and get something worse. That agreement was presented by Mr. Marlatt a few days later to the House Committee, and this committee adopted it.

PROVISIONS AND PRESENT STATUS OF BILL

The bill as it now stands, the last one the Committee knows anything about, provides in substance:

Section 1. That it shall be unlawful to import nursery stock till a permit shall have been issued therefor by the Secretary of Agriculture and accompanied by a foreign certificate.

Section 2 provides for necessary notification, and this notification must show name and address of shipper and consignee, nature and quantity of stock, and country and locality where grown.

Section 3. Package shall be plainly marked to indicate nature of contents, name and address of consignee, and place where grown.

Section 4. Same marking on packages of imported nursery stock in interstate commerce.

Section 5 provides for including in the provisions other plants, seeds, and so forth, not included in the term nursery stock.

Section 6 defines nursery stock.

Section 7 is the quarantine section on imported stock, and states that whenever, in order to prevent the introduction of diseases or insects new or not widely distributed in the United States, the Secretary shall determine that it is necessary to prohibit the importation of nursery stock or other grades of plants from the country where such disease or insect infestation exists, he shall promulgate such determination, but before so doing shall, after due notice to interested parties, give a public hearing.

Section 8 is on domestic quarantine, and provides for notices to parties interested.

Section 9 provides that the Secretary shall make and promulgate rules and regulations, and it has been agreed with the Department that before these rules and regulations are decided on, the nurserymen's committee shall be consulted.

Section 10 provides penalties.

Section 11 provides that the act of an officer in violation of the law shall be deemed an act of the corporation.

Section 12 authorizes the Secretary to appoint a federal horticultural board of five members from the Bureau of Entomology, the Bureau of Plant Industry, and the Bureau of Forest Service, not more than two being from one bureau.

Section 13 provides an appropriation of \$25,000.

Section 14 makes the act effective July 1st, 1912.

Mr. Pitkin stated further that the bill does not provide for federal inspection of imported stock, but leaves that to the state departments as at present. The bill is on the regular calendar, but I am informed that it is not likely to be reached during the present session.

Many of our members, no doubt, feel that they cannot endorse any bill providing for quarantine regulations. Your committee would be very glad to report that no such bill had been agreed upon. It was evident, however, that some legislation was bound to be enacted. It was evident that the

sentiment of the Department of Agriculture, the House Committee on Agriculture, and the very strong California fruit interests, was thoroughly in favor of drastic regulations which would seriously hamper the nurserymen. It appeared that the best thing to do was to compromise the differences with the Department of Agriculture, and unite with the Department in favoring the present bill, believing that if we continued our opposition, the result would be something much more burdensome than the bill now on the calendar. No legislation is likely to be enacted during the present session. Therefore, your legislative committee should be instructed as to your views and wishes, and authorized to watch the progress of the present bill, and safeguard as far as possible the interests of the members of this Association.

EASTERN LEGISLATION

Your committee has had under consideration one or two items of state legislation in the East. The committee has tried to arrange with the authorities of the state of Maine for a test case on the agent's license law, but they evidently are not anxious to test out their law. They continue to collect a license fee, however, from those that are willing to pay.

The committee has advised members generally through the trade journals to instruct their agents not to pay the license fee. The committee for the current year should be authorized to continue their oversight of the situation. In some other states consideration has been given to the laws, but it has been thought best to let matters rest till some move was made by state officials.

A new law in Massachusetts gives the inspector opportunity for discretion in connection with shipments containing some diseased or infested stock, and permits him to admit the clean portion and destroy any few infested trees he may find.

Members of committee—Wm. Pitkin, J. H. Dayton, J. M. Pitkin, Abner Hoopes, Thos. B. Meehan.

DIGEST OF REPORT OF COMMITTEE ON LEGISLATION
WEST OF MISSISSIPPI RIVER

By PETER YOUNGERS, Chairman

As soon as possible after the convention at St. Louis, I commenced an action in Montana. The Montana Nursery Company of Billings and some personal friends all recommended Mr. W. M. Johnston of Billings as the proper attorney. I personally visited him, and had him prepare an opinion and agree upon a price, in the event of taking the matter to court. Upon submitting the matter to the executive committee, I received word to go ahead.

In October I instructed Mr. Johnston to proceed to test the constitutionality of the law regarding license fee. It seemed impossible to start action, as the attorney-general would not join in the matter, nor would the state board

(Continued on page 252)



IRVING ROUSE

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AMERICAN ASSOCIATION OF NURSERYMEN

PRESIDENT—J. H. Dayton, Painesville, Ohio; vice-president, W. H. Wyman, North Abington, Mass.; secretary, John Hall, Rochester, N. Y.; treasurer, C. L. Yates, Rochester, N. Y.
EXECUTIVE COMMITTEE—E. M. Sherman, Charles City, Ia.; H. B. Chase, Huntsville, Ala.; J. M. Pitkin, Newark, N. Y.; J. H. Dayton, *Ex-Officio*, Painesville, Ohio; John Hall, *Ex-Officio*, Sec'y, Rochester, N. Y.

CHAIRMEN OF COMMITTEES.

TRANSPORTATION—D. S. Lake, Shenandoah, Ia.; Chas. M. Sizemore, Louisiana, Mo.
TARIFF—Irving Rouse, Rochester, N. Y.
LEGISLATION EAST OF MISSISSIPPI RIVER—Wm. Pitkin, Rochester, N. Y.
LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.
CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.
PROGRAM—C. J. Maloy, Rochester, N. Y.
EXHIBITS—A. E. Robinson, Bedford, Mass.
ARRANGEMENTS—John Hall, Rochester, N. Y.; W. H. Wyman, North Abington, Mass.; H. P. Kelsey, Salem, Mass.
ENTERTAINMENT—J. Woodward Manning, North Wilmington, Mass.
PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md.; C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.
ROOT-GALL—E. A. Smith, Lake City, Minn.

STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dreshertown, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.
Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.
Connecticut Nurserymen's Association—President, W. W. McCartney, New Haven, Conn.; Secretary, F. L. Thomas, Manchester, Conn.
Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
National Nurserymen's Association of Ohio—President, J. W. McNary, Dayton O.; secretary, W. B. Cole, Painesville, O.
Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.
Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary, Earl Peters, Mt. Holy Springs, Pa.
Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.
Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.
Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

THE BOSTON MEETING

We have stated elsewhere that the Boston meeting did not make a record for amount of business transacted. There was no effort made to do this. We believe, however, it did make a record in the matter of educational and social enjoyments. It was a real opportunity for many of our good friends from the Middle West to see and study plants and plant conditions as found in and surrounding the original home of the American people. The visits to the parks, the Arnold Arboretum, the nurseries in the environment of Boston, were filled with pleasure and instruction. It was most gratifying to see the large number of ladies present, sometimes the entire family of the nurseryman. This is as it should be.

We are disposed to compliment the manner in which President Dayton handled the business of the convention. He showed executive ability and power to transact business in an expeditious and at the same time courteous and satisfactory manner. As stated in our last issue, both ex-president and president-elect leave for a trip to the nursery regions of Europe in a few days. We wish them a pleasant and instructive visit, and hope that it will be productive of ideas which may redound to the success of our own Association.

We should not close this note without again recognizing the splendid efforts of the entertainment committee. It is not an easy matter where numbers are not definitely known to arrange and run off excursions smoothly and on time. Mr. J. Woodward Manning demonstrated his ability to do this, and earned the gratitude of the members of the Association.

FEDERAL LEGISLATION

The comprehensive report of Chairman Pitkin demonstrated very clearly that, in accordance with the instructions received from the Society at the St. Louis meeting, the Committee had left no stone unturned in its efforts to secure what is needed for the nursery interests of the country, namely, in the terms of the St. Louis resolution, "safe and sane legislation." The situation has been made somewhat difficult by the attitude of Pacific Coast nurserymen. In that region, they are literally mad on the subject of legislation. It is, in fact, common to find each county with its own restrictive, regulative laws; and it is said to be more difficult to ship from one county to another in California than from one state to another in the East. The shipments within the state of California are thus attended by an immense amount of red tape and difficulty. This represents a type of "frenzied legislation" that ought to be avoided in all provisions to be carried out under federal direction. The attitude of the Pacific Coast fruit growers and their supporters has done much to hamper the work of the Committee.

Again, it has not been easy at all times to exactly locate the desires and position of the representatives of the Department of Agriculture. The first bill proposed inspection at the port of entry, which was readily shown by THE NATIONAL NURSERYMAN to be absolutely impractical. Then inspection at destination was proposed and agreed to. Now it seems to be quarantine without any special type of inspection provided. However, this would simply throw the responsibility of inspection upon the individual states, and it would mean using the machinery already in operation in each state.

The Committee has again by the action of the American Association of Nurserymen been given practically *carte blanche* to further all reasonable legislation. In this way, as in the case of its action last year, the Association has committed itself to the principle of legislation and the protection of home fruit industries. It is to be hoped that the matter will not drag along indefinitely, as its present unsettled condition injects an element of uncertainty into the importer's business, which is not justifiable. After all is said and done, it is pertinent to ask, in reference to home affairs, what domestic quarantine has ever done in the restricting of injurious insects? We shall be glad to publish striking examples of the influence of such legislation applied to any part of the country.

MEETING OF AMERICAN PEONY SOCIETY

NEW YORK STATE COLLEGE OF AGRICULTURE, ITHACA,
JUNE 18, 19

The annual meeting and exhibition of this Society was held in Ithaca on the dates above. The weather was favorable, the Cornell trial plots were at the height of condition, and the exhibition blooms gathered therefrom and displayed in the auditorium of the State College of Agriculture made, together with the competitive exhibits, a show that was surpassingly attractive. The main business of the Society had to do with the disposal of the surplus plants of the trial plots. This coöperative work, which has been going on for six or seven years between the American Peony Society and the Department of Horticulture, is now brought to a close, and will be finally wound up when an additional report is published, which is now in course of preparation, giving complete and authoritative descriptions with synonyms of a select list of varieties approved and recommended by the Society and the Committee on Nomenclature. Arrangements to this end were made, and arrangements were also perfected for the sale of the surplus plants. When this final bulletin is published, it will complete a series of five bulletins on the culture, nomenclature, and classification of the peony. These are all available to members of the American Peony Society. The first four are on file in the Department of Horticulture, and are available to residents of New York, but can only be secured by purchase by non-residents or by taking out membership in the Peony Society. The President is Mr. B. H. Farr, Wyomissing, Pennsylvania; secretary, Prof. A. P. Saunders, Clinton, New York.

PRESIDENT THOMAS B. MEEHAN

The newly elected president of the American Association of Nurserymen is a thoroughly trained plantsman by experience as well as by heritage. His father secured his apprenticeship in gardening and his training in botany in the schools of Britain. He came to this country at an early age, and established a nursery business in the city made famous to botanists by the operations of Bartram and Marshall. In due time, he has been succeeded by his three sons.

The subject of our sketch was born in Philadelphia May 7, 1866. He received his education in the public schools of Philadelphia and began active work in the nursery business at the age of fifteen. Starting at the bottom, he, after the old country fashion, passed through the various departments and entered the office at twenty, where his success was so marked that his father turned over the general management of the business to him and took him into partnership the following year, although maintaining an oversight of the business for some time later. As the two younger sons, J. Franklin Meehan and S. Mendelson Meehan, reached their majority, they were also taken into partnership.

As the growth of the city of Philadelphia expanded, these men, with commendable foresight, secured land at Dresher, then Dreshertown, Pennsylvania, for the growing of their ornamental and fruit crops. This was a venture by the younger men, thoroughly sanctioned by Thomas Meehan, Sr. The founder of the firm died in 1901. The business was then purchased by the three sons and was divided into three departments. The wholesale department, under Thomas B. Meehan, is located at Dresher. The retail establishment is at the old stand in Germantown, while there is associated with it a landscape department, which is, however, quite distinct. These two latter departments are managed by S. Mendelson Meehan, in charge of the retail department, and J. Franklin Meehan, in charge of the landscape department. An interesting feature of the company's business is, as indicated above, that each of these departments is managed quite distinct from the other, and that in the interchange of stock between one and the other a strict account is kept and charges made as if purchases were from an outside concern.

The wholesale department at Dresher has grown rapidly, and over two hundred twenty-five acres are now occupied by nursery stock. Large storage cellars, packing sheds and seed houses have been erected, so that the whole plant represents a well equipped wholesale department.

Mr. Meehan has a splendid record of attendance at the meetings of the American Association of Nurserymen. He has not missed a single one for twenty-eight years, with the exception of one year, when his excuse was an excellent one, namely, that he was absent on his wedding trip. He has just completed his twenty-second consecutive year as secretary of the American Nurserymen's Protective Association. He has also occupied the executive chair of the Philadelphia Florists' Association.

Mr. Meehan was accompanied by his wife, daughter, and son Albert T. Meehan, at the Boston convention. It is pleasing to know that his son, who is an ex-student of Cornell University, has adopted the nursery business as his life work and is now actively engaged in the wholesale department at Dresher. President Meehan sails on the George Washington, July 13th, for a six weeks' tour in Europe, accompanied by ex-President Dayton and Mr. James McHutchison.

E. S. Welch of Shenandoah, Iowa, with his wife called on his Rochester friends after the Convention, before returning to Shenandoah.

agree to a test case. The attorney-general in a letter expressed the opinion that the law was unconstitutional.

As soon as I received that report, I notified nurserymen through the trade journals, and issued three hundred circulars not to pay license fee on Montana.

On December 14, the Mount Arbor Nurseries received the following message: "Shipment from your house to Montana Nursery Company being held for license fee. Your license expired April 25. Send twenty-five dollars and avoid injury to stock." (Signed) M. S. Dean.

Mr. Welch immediately advised me of the message, and I advised paying the fee under protest, which he did.

December 20, Mr. Welch received the following: "Appreciating the fact that your order was placed by a licensed nurseryman, instead of a regular agent, we herewith return your draft. Stock delivered at once. Immediately upon receipt of your telegram, I 'phoned our inspector to inspect the goods. (Signed) M. L. Dean."

Mr. Welch informed me the twenty-five dollars was refunded. I took it for granted there would be no further attempt to collect a license fee, but later the State Horticultural Society urged Mr. Dean to collect a fee, annulling everything the attorney-general had rendered in our favor. We have been unsuccessful as yet in getting the matter into the courts. As long as the nurserymen will pay license, if there is no hold-up, we cannot get into court.

Youngers & Company made a proposition to our attorney, offering to ship five hundred trees to anyone in the state, if the commission would agree to hold up the shipment. But they would not agree to it.

On May fourth I received another letter, stating that Mr. Dean had advised the attorney, and the State Board had directed him not to aid in any way toward getting a case into the Montana courts. This is the condition we are now in. In my judgment, the only way is for this Association to refuse to pay license. This could be done in the fall, and I do not believe there would be a single shipment held up, as they do not want to get into court, but simply want twenty-five dollars from each nurseryman.

A letter dated May fourth states that the Board had decided to have the law changed at the next legislature.

Mr. Youngers then mentioned briefly the situation in Wyoming, which is much the same as in Montana, and went on to the case of W. C. Reed in Colorado. Two dates were set for the hearing of this case, but action was twice postponed, the date now arranged for being sometime in September. It is desired to make this a test of the constitutionality of the law, as well as a suit for damages, and to that end the Western Association and individuals in the Middle West have pledged \$900 for the carrying on of the work.

Mr. Youngers spoke in high terms of the assistance of Mr. Stark and Professor Hunter in preventing drastic legislation in the matter of federal inspection, and closed by say-

ing: "If this Association is not in favor of any legislation, let us so state; and if we want legislation, tell the committee just what we want, and insist that the instructions are followed."

Mr. J. M. Pitkin then moved the following:

Resolved, that an order be drawn on the Treasurer to pay the bills of Mr. W. P. Stark, \$249.44, and of Professor Hunter, \$126.50, covering trips to Washington, D. C., in interest of federal inspection, said bills having been certified correct by Mr. Peter Youngers, chairman of the Legislative Committee West of the Mississippi. (Carried).

DISCUSSION ON REPORT ON LEGISLATION

The report of the committee was discussed by Mr. John Morey of Dansville, Mr. F. W. Kelley and others. The force of Mr. Rouse's remarks were also recognized by several members. Several motions were made and withdrawn. The following prevailed:

Mr. A. J. Brown: I don't see any conflict between the reports of Mr. Pitkin and Mr. Youngers. Therefore, I offer as a substitute or an amendment, that the reports of these gentlemen of the East and the West be accepted and considered by this body as a report of the Legislative Committee.

DISCUSSION ON THESE MOTIONS

Professor Worsham: As a member of the entomological committee who for four years have been conferring with your able committee, I think this is a most important question. Your Legislative Committee has put in some good hard work. We sat up to

the wee, sma' hours trying to effect suitable compromise. We are trying to protect America's plant interests. We are not asking for any quarantine. We want protection and nothing more. We believe in injecting common sense into this question. Your vote on this question will indicate whether you want legislation, or whether you do not want legislation. This measure which your committees agree to with the exception of one man is a compromise. It will give you the protection that you need. You will have the privilege of appealing to the Secretary of Agriculture or the Supreme Court.

If you vote against that report at this time, it will go out to the world that the American nurserymen want no legislation. I know that the Southern nurserymen are behind this matter; Mr. Youngers' report shows that the Western nurserymen are behind it. This is a model measure; it gives you protection without any strict quarantine. If you don't adopt something of this kind, Congress is going to pass something far more drastic.

Mr. F. W. Kelsey: I deprecate any action of the minority or of the majority, of the western or the eastern members. I should like to see the report of the majority



PETER YOUNGERS

accepted with thanks. I should like to see the provision of the minority recommendation carried out also. I would offer this resolution:

Resolved, that it is the sense of this Association that the nursery stock inspection bill be amended by the insertion of a provision requiring not less than sixty days' public notice before any prohibitory quarantine regulations can go into effect.

Mr. Morey: The resolution now offered is out of order. We are to proceed to the acceptance or rejection of the original motion as amended, (Point of order sustained.)

Mr. Wm. Pitkin: It strikes me that it isn't so much the vital question as to what report should be accepted by this Association, as the formulation of a resolution which will clearly and definitely set forth the views of the members of this Association on this question of legislation, and if possible, to have this resolution in such shape as will clearly define the wishes of the majority, and in such shape that the majority will be willing to stand by that resolution for the next year, and instruct the Legislative Committee exactly as to what this association desires to have done. It does not seem to me that the resolution and the amendment which is now before the house will distinctly and clearly set forth that position. The majority report did not contain any resolution, except to say that the new legislative committee should be properly instructed. If you adopt that majority report, you are not outlining your views, you are not outlining any instructions for the new Legislative Committee. I tried in my report to make it perfectly clear that the Committee did not accept the bill because we approved, but because we had to.

A year ago the Committee presented a history of legislative matters for the preceding three years. I think if there was anything made clear in that report, it was this—that the Committee had constantly opposed any and all federal legislation which referred in any way to federal quarantine; that we were absolutely opposed to a bill which contained any quarantine provision; that we were in favor of a federal bill which would provide for the federal inspection of imported nursery stock entering the United States. After the consideration of that report, you passed a resolution which in substance said this: that the report of the chairman of the Legislative Committee be accepted; that this Association heartily and thoroughly approves of the course of its Committee in connection with federal legislation during the three years. It was further resolved that this Association confers on its Legislative Committee full power and authority to act for it in all matters of federal legislation, with the suggestion that the Association favors federal inspection of foreign stock on safe, sane, and practical lines; and that the Committee shall use its strongest efforts to defeat any attempt to place such powers in the hands of the Secretary of Agriculture and bureau chiefs as have been proposed in bills under dis-

cussion the past three years. I held it meant you were opposed to any quarantine bill, that you were in favor of a bill providing for inspection. Your Committee acted on that resolution during the past year and opposed as far as we could any bill which would provide for any kind of quarantine.

It developed, however, during the year that there was a sentiment which was not opposed to quarantine. When we were going to be divided and not present a unanimous front, we were simply in a position where we had to agree to something, and we did. That is the reason why the bill as at present is on the calendar and ready for passing.

That is why I say it seems to me this Association in passing any resolution should make it absolutely clear as to whether they favor quarantine or are opposed to it, and should instruct the new legislative committee so that it fully understands the sentiment of this Association. Further, and all important, if you can agree on a resolution, agree to it with the idea that you are going to stand behind it and stand by the committee and help that committee to carry out the instructions that you give.

Professor Worsham: The question is whether or not you approve of Mr. Pitkin's report. That carries with it your sentiment as to quarantine or whatever the other questions may be.

Mr. Morey: We can accept and approve of the report of the Committee. We are advised by Mr. Pitkin that this bill may not become a law during the present session. If that is the case, and we are given until next December, perhaps we can eliminate entirely the objectionable features.

President Dayton: It seems to me the question is, shall we accept the report of the Legislative Committee and enter it upon the records as being received and accepted?

Mr. Kelsey: I would suggest that the report of the Committee on Legislation be accepted and the committee continued with power.

Professor Craig: It seems to me that is the one thing to do—to accept the report; and then I should very much like to see the suggestions of the committee carried out, namely, instruction by this body to such future committee as may be appointed as to what the Association would like to have done. It seems to me the way to do that is to appoint a committee which will report at this convention at a later session such provisions as may be desired.

President Dayton: Will you as a body of nurserymen accept the reports made by the eastern and western committees? (Accepted).

Mr. Youngers: Before we leave this question, I believe that the chairman ought to appoint a committee of five to formulate something we can agree upon and present it at our next meeting. I make that as a motion.



J. M. PITKIN

Professor Craig: May I suggest that the chairman of the eastern and western committees be placed on that committee? (Carried).

Mr. Wm. Pitkin: I would offer this resolution: That if, in the judgment of the Legislative Committee of which Mr. Youngers is chairman, the case of Mr. Reed is a good case to fight, and will establish the points that we are anxious to have brought out, this Association place a sum not to exceed \$1,000 at the disposal of the Committee on Legislation West of the Mississippi for this purpose. (Carried).

REPORT OF VICE-PRESIDENTS

The Committee of Vice-Presidents reported that invitations for the next annual convention had been received from organizations representing Niagara Falls, Indianapolis, Atlantic City, Chicago, Cleveland, San Francisco, and Portland, Oregon. Portland receives the recommendation of the state vice-presidents.

OFFICERS

For officers the following recommendations are made: President, Thomas B. Meehan; vice-president, J. B. Pilkington; secretary, John Hall; treasurer, C. L. Yates; Executive committee, Henry B. Chase, J. W. Hill, P. A. Dix. It was recommended that in future the Secretary be paid travelling expenses in addition to salary.

Mr. Morey: I move that the report of the vice-presidents be accepted and adopted, and that the Secretary be instructed to cast one ballot in accordance with such recommendations. (Carried).

President Dayton: I will name as a committee to report tomorrow on legislation Mr. Wm. Pitkin, Mr. Youngers, Mr. W. P. Stark, Mr. Meehan and Mr. Abner Hoopes.

Friday Morning, June 14, 1912

REPORT OF COMMITTEE ON EXHIBITS

The exhibits this year make up in quality what they lack in quantity. Many varieties of rare conifers, shrubs, and peonies are shown, while catalogue makers and supply houses exhibit fine samples of their products.

This report was placed on file to be printed in the report.

REPORT OF AUDITING COMMITTEE

We, your auditing committee, beg to report that we have examined the books and accounts of your Secretary and Treasurer, together with their vouchers and receipts, and find the same to be correct.

JOHN WATSON,
W. L. HART,
W. C. REED.

Mr. McFarland: I move that we appoint a member to attend the Conservation Congress, in accordance with the wishes of Professor Worsham. (Carried).

REPORT OF SPECIAL COMMITTEE ON LEGISLATION

Mr. Wm. Pitkin: Your committee understood that it was to consider a form of resolution to be presented at the

meeting this morning for the consideration of the convention. The committee unanimously agreed to report the following resolution:

Resolved, that the report of the Legislative Committee on matters of federal legislation be accepted, and that their endorsement of House Bill No. 24119 be approved, and further that the new legislative committee be instructed to coöperate with the United States Department of Agriculture in urging the speedy passage of the bill referred to or any other bill not materially changing the provisions therein.

WM. PITKIN,
PETER YOUNGERS,
THOS. B. MEEHAN,
WM. P. STARK,
ABNER HOOPES.

Colonel Watrous: I move the adoption of that resolution. (Carried).

PACIFIC COAST HEARD FROM

President Dayton asked Mr. P. A. Dix, President of the Pacific Coast Nurserymen's Association, to say a few words.

Mr. Dix: I want it distinctly understood to begin with that the Pacific Coast Nurserymen's Association is not an antagonistic association to the American. We organized to coöperate with you; we organized to protect our interests a little more definitely than you can do by so large an association, our conditions and surroundings being very different. I am glad to bring to you this morning the greetings of that association. We held our tenth annual meeting in Salt Lake City recently. It was a three days' session, well attended, and one of great interest. We hope, in view of the fact that we will hold our next meeting at Portland at the same time this association meets there, to be able to lend a helping hand to the American Association of Nurserymen.

Probably the most important thing we did at our last meeting was to set in operation the machinery for creating a fund of \$20,000, ten per cent. of which is available immediately and the balance as fast as required. This fund is for the purpose of aiding in legislation, in uniform inspection. We hope to have at least a uniform legislation act in our Pacific Coast States, and a uniform inspection law. Operating with us along this line are the horticultural commissioners of the States of Idaho, Utah, and Montana, and we trust that the others will join in later. These gentlemen organized themselves at Sale Lake, and are ready to coöperate with us in getting sane and proper legislation. This fund is not a war fund—a war fund if necessary, but a peace fund if possible. We shall hope for your coöperation with us along this line.

Now, we bid you a hearty welcome in the name of our association to Portland next year.

THE INCOMING PRESIDENT

President-elect Meehan was escorted to the platform and spoke as follows:

It is surely a great honor for any man to be elected president of this association, and I assure you that I value that distinction most heartily. After the brilliant career of our retiring president, I feel that I am not very well fitted to carry

on the work of this Association; but I assure you I will do everything possible to further the interests of the association, and in that endeavor I shall certainly hope to have the full sympathy and assistance of every one of its members. We should be a united body; and when I say that, I mean that we want to work together to further the nursery interests throughout the United States. We can only do that by working together and working for the association.

Mr. Dix, President of the Pacific Coast Nurserymen's Association, tells us that there are upwards of two hundred fifty members in that Western organization, and we have only about four hundred. It seems to me that our members have been lax in looking after the interests of this national organization. Every member should make it a point to bring in at least three or four members during the next year. I hope that each one of you will make it your personal duty to see that some nearby nurseryman is brought into the association next year. The work of the association is not done at the convention—it is done by your committees during the year. To carry on that work, we must have not only the coöperation, but also a good bank account.

I am more than pleased that the convention voted to go to Portland. I had the great pleasure of visiting the Coast three years ago in company with our President, and I assure you we were received with open arms. We were shown everything, and we found it a particularly interesting country, especially for nurserymen. The nursery business is entirely different from that of the East and Middle West. It will pay every one of you to go out there. Let us join together, and take a good big crowd out, and show the Pacific Coast Nurserymen's Association that the American Association of Nurserymen amounts to something.

I very greatly appreciate the honor you have done me, and shall do everything possible to further the legitimate work of the association.

Vice-President-elect Pilkington, on being escorted to the platform, spoke as follows:

I don't know how to take this honor that has been shown me. I am not a speaker. I believe when you find a railroad man that is a vice-president, he is usually general manager. When you come to Portland, I want to be general manager, so far as receiving you and providing for your entertainment is concerned.

I am grateful, and appreciate this honor. I believe it is the first time it has been conferred upon a man from the extreme West. We will all be glad to see you. There will certainly be nothing left undone to make your coming pleasant.

Secretary Hall announced the receipt of telegrams from the governor of Oregon and the mayor of Portland, inviting the Association to hold its next meeting in that city.

THE QUESTION BOX

President Dayton: The chairman of the Program Committee wanted to introduce an innovation in the form of a question box. I am going to ask Mr. J. M. Pitkin to consider one or two of the most important questions.

Mr. Pitkin: "What are the best materials to use for packing, moss, excelsior or shavings?" I'd like to ask if there is any other material that is used extensively.

Mr. H. P. Kelsey: For bulbs, charcoal and sawdust are used, and for some kinds you have to use these materials. Some things are shipped in sand, some in dry dirt, and some in absolutely dry sphagnum. I think sphagnum moss is the best packing material for long distance shipments. I heard Mr. Wilson, the explorer, say yesterday that he sent to this country some little evergreens pulled from the rocks in distant Thibet. They were ten weeks in transit, and arrived in such condition that we saw several hundred of them growing at the Arnold Arboretum. They were packed in sphagnum moss quite thoroughly dry. That is the most important point of it, for some stock will heat, and some will start growth, if moist.

Mr. Pitkin: Is that material dry when you get it in the bale?

Mr. Kelsey: We get it extremely wet right out of the swamps. I understand commercial sphagnum moss is usually dry. We put ours out in large piles and let the water drain out. Rotted sphagnum is sometimes used but I don't think it is worth much in packing. In about two seasons, if piled outside, it will begin to rot.

Mr. Meehan: I think if Mr. Kelsey had to buy his sphagnum by the carload, he would look for something cheaper. It is very true that for small evergreens moss is preferable. We use shingletoe and baled shavings. We took that up after considerable experimenting with different mosses, and find it the best. We use half of shavings and half of shingletoe. The stock will come out moist if shipped from Boston to the Pacific Coast. It must, however, be thoroughly soaked in the first place.

Mr. Cashman: I would like to ask if the gentleman has found that moss will hold moisture longer than shingletoe. In speaking of excelsior, does he mean long excelsior? Does he find that moss holds moisture longer than the wood shavings?

Mr. Kelsey: From the looks of some shipments I get packed in that toe, I should say yes. It is largely a question of proper packing. I think American nurserymen do mighty poor packing. The foreign shippers know how to pack much better. Good packing pays. I think it is the good packers who are going to get the business in the future.

Mr. Pitkin: We use mainly waste excelsior. We have mixed it with shavings. But one point we are very careful about is to put our packing material between the bundles of trees and the sides of the box, and also between the ends of the roots and the end of the box. I think a great deal of trouble comes from the fact that you do not give protection between the roots and the box. We have good success with waste excelsior.

Mr. Reed: Two years ago I sent a shipment to Michigan, which was lost on the road, and was nine weeks in transit. When it arrived the stock was still in good shape. This was all packed in shingletoe.

Mr. Fleming: In what season of the year was this?

Mr. Reed: It was shipped about the fifth of October.

Mr. Cashman: I think the matter of packing very important, and have been experimenting with both moss and shingletoe. We have never shipped very long distances, but we find that the wood packing will retain moisture longer than moss, and for that reason I believe it preferable. Trees

will not get warm in wood packing. We buy our moss in earlots from the Wisconsin swamps. We cut the bales open and pile them, letting them remain over one winter. We have a large amount of snow, which melts on the moss and soaks it, so that it is in good shape for the spring packing. We find where goods are properly packed with shingletoe, they will carry six or eight weeks without losing any noticeable moisture. I think the reason why the foreign shippers don't use so much of it is that it is not readily available there.

In piling the wood material or moss during the summer, we find that during a spell of dry weather of two weeks the moss will dry out in the pile to the depth of six or eight inches, while shingletoe does not become dry for more than one-half inch.

Mr. Weeks: I'd like to ask if you don't think the dry moss will have moisture enough without wetting to keep the trees in good shape. In foreign shipments you always receive dry moss.

Mr. Cashman: What I meant by dry moss was moss that had been dried for baling. There is no moisture in that at all. I wouldn't consider that very good packing.

A Member: Is it the rule for Mr. Kelsey to pack foreign shipments in dry moss?

Mr. Kelsey: We sometimes dry it almost completely. We have dry moss for that purpose. We would lose the shipments otherwise.

EXHIBITS

REPORT PREPARED BY NATIONAL NURSERYMAN

Rochester Lithographing Co., Rochester, N. Y., represented by Mr. Fox. An extensive exhibit of colored plates and plate books.

A. B. Morse Co., St. Joseph, Mo. A line of nursery catalogues and a general line of nursery printing. Locally, this firm has been printing nursery catalogues for twenty years. Now their territory extends from Maine to California, and from Minnesota to Texas.

Allen-Bailey Tag Co., Dansville, N. Y. An exhibit of plant and tree labels and stakes. The firm is introducing to the trade a two-sided printed tree label, having the variety name printed on both sides at no additional cost. They are also putting out this year a new form of blank tree label, pierced, with the wire twisted through the hole. The exhibit included tapering plant supports and labels with either iron or copper wire.

Baker Brothers Co., Fort Worth, Tex., showed a plant of *Salvia Greggii*, a hardy, everblooming, red-flowering shrub.

Clinton Falls Nursery Co., Owatonna, Minn. A machinery exhibit; firmer, soil pulverizer, the Cashman trencher, box clamp, etc.

J. K. Morrison Grocery & Produce Co., Statesville, N. C. Exhibit of North Carolina peach pits.

United Lithograph and Printing Co., Rochester, N. Y. Exhibit of nursery catalogues, flower plates, cards, and post

eards. The Company has the exclusive use and sale in this country of German process plates.

Steeher Lithographing Co., Rochester, N. Y. A display of lithograph plates and de luxe plate book, which is becoming very popular now with the nurserymen. Prominent among their exhibits was the largest apple in the world, measuring about three feet across!

Thomas Meehan & Sons, Inc., Dresher, Pa. Exhibit of Red Star raffia, and the "Handy" caliper, made of aluminum, in sizes from $1\frac{1}{4}$ to $3\frac{1}{2}$ ". Also the "Handy Junior" for calipering small sizes.

The Benjamin Chase Co., Derry, N. H. Wood labels in various sizes and large assortment.

McHutehison & Co., New York. Primarily an exhibit of Red Star raffia, from which this company has made an enviable reputation.

Dayton Fruit Tree Label Co., Dayton, Ohio. An exhibit of labels exclusively, tree labels, wired and unwired, printed and unprinted; pot labels; garden stakes.

P. J. Berekmans Co., Augusta, Ga. Exhibit of Biotas in considerable variety. Fine individual specimens, including *B. aurea nana*, the special development of this company.

E. J. Shaylor, Wellesley Farms, Mass. Collection of peony blooms.

W. N. Searff, New Carlisle, Ohio. Small fruit specialist. Exhibit of plants of black raspberries, red raspberries, blackberries, and dewberries.

Sherman Nursery Co., Charles City, Iowa. Collection of coniferous seedlings in large variety, exhibiting nurserymen's grades of this stock.

Bay State Nurseries, North Abington, Mass. Exhibits in pots. An extensive

collection of conifers, kalmias, and other broadleaved evergreens. Attractively arranged, illustrating well grown plants. Also a collection of ornamental trees, including lilacs, maples, and oaks.

Cherry Hill Nurseries, West Newbury, Mass. An attractive collection of peonies and German iris. These nurseries have long been noted as a center for not only standard varieties of peonies, but seedlings of their own origination.

Little Tree Farms, South Framingham, Mass. Collection of conifers in pots, including a few of the important deciduous shade and ornamental trees. A striking feature was a photographic panorama of the Little Tree Farm Nurseries.

W. A. Manda, South Orange, N. J. An exhibit of Manda's golden privet in different sizes, showing the attractive features of this desirable ornamental plant.

J. G. Harrison & Sons, Berlin, Md. Potted evergreens and specimens of nursery stock.

Breck-Robinson Co., Boston, Mass. Exhibit of trellises and Colonial tubs for reception of ornamental plants.

J. Horace McFarland Co., Harrisburg, Pa., extensive collection of catalogs and advertising matter.



J. W. HILL
Chairman Committee on Resolutions

REPORT OF COMMITTEE ON RESOLUTIONS

J. W. HILL, Chairman

To the President and Members of the American Association of Nurserymen in Convention Assembled:

We, your Committee on Resolutions, respectfully submit the following for your consideration:

Year by year as we assemble in annual convention, we find vacancies in our ranks; and since our last meeting, seven of our members have passed beneath the low green tent whose curtain never outward swings. Lewis Chase, Norman J. Coleman, James J. Harrison, William H. Moon, John Siebenthaler, William Smith, and W. F. Heikes are no longer with us. Ripe in years, their earthly work ended, they have left behind a record of energy, activity, and accomplishment, as a precious legacy to their relatives and associates. We recommend that suitable biographical memoirs appear in the proceedings, and that the Secretary transmit to the families of our deceased brethren our appreciation of their work, and our deep sympathy in their and our personal bereavement.

"More homelike seems the vast unknown
Since they have entered there;
To follow them were not so hard
Wherever they may fare."

Resolved, that the Secretary be directed to send a telegram to Mr. Irving Rouse of Rochester, New York, expressing on behalf of the Association our sincere sympathy in the great bereavement recently placed on him in the loss of his devoted wife, and the anxiety caused him at the present time by the severe illness of his daughter.

I move, Mr. Chairman, the adoption of the resolution as read by a rising vote. (Resolution adopted).

Resolved, that it be the sense of this Association that our vital interest demands the prompt enactment of a sane, safe, practical and effective federal inspection bill, by which adequate protection may be afforded the interests of the members of the Association and horticultural and agricultural interests at large.

Resolved, further, that we urge upon the Legislative Committee the necessity of putting forth every effort to secure such legislation with the least possible delay, and pledge the said committee our most hearty cooperation and support.

Resolved, that we take this method of expressing to the Legislative Committee and Professor Hunter our highest appreciation of the valued services rendered during the past year in their efforts to avoid drastic legislation and secure instead of the bill pending last year the passage of a sane and safe bill which will afford proper protection to our interests.

Mr. A. J. Brown: It seems to me that matter was thoroughly covered by the report of that committee which was adopted some time ago.

Mr. Youngers: I move that this resolution be withdrawn. (Carried).

COMMENT:—We shall in future years recall with much pleasure the thirty-seventh annual meeting of the American Association of Nurserymen, held in Boston, June 12-14, 1912. We regard this meeting as being one of the most enjoyable and profitable in the history of the Association, due largely

to the efforts of entertainment committee, composed of Messrs. Manning, Wyman, Kelsey, and Robinson. We appreciate greatly the courtesy extended us by Prof. Charles S. Sargent in affording us the privilege of an auto ride through the Arnold Arboretum and the valuable object lessons derived therefrom; also the rare privilege of visiting the estate of Professor Sargent. We appreciate also the privilege of the delightful drive through the boulevards of Boston, and take this opportunity of congratulating the city upon its extensive and attractive park system. We desire to express to the gentlemen sincere thanks for the pleasant afternoon thus afforded us; to the City of Boston for the use of the city boat Monitor; to the Mayor for his instructive talk to the Association; to the Massachusetts Horticultural Society for the lectures by Dr. Shaw and Professor Sears; to Jackson Dawson, America's greatest propagator, for his cordial greeting to the nurserymen; and again to the entertainment committee for the many special attentions shown the ladies of our organization. We shall bid adieu to the City of Boston and our hosts with the deepest feelings of gratitude in our hearts, and assure them that they stand at the head of the list as entertainers. (Resolutions adopted).

(Resolution by Mr. F. W. Kelsey):

WHEREAS, the frequent freight delays in the shipment of nursery stock have become a source of great annoyance, very heavy losses, and an unnecessary burden to the trade and purchasers, and

WHEREAS, the heavy transportation charges on nursery produce should assure its prompt forwarding as perishable material. Therefore, be it

Resolved, that the Committee on Transportation is hereby authorized to take up this subject with the proper officials with full authority to act for the Association toward accomplishing the desired results. (Motion to lay this on the table was carried).

TO RETIRING OFFICERS

We desire to present to our retiring president our sincere thanks for the very efficient and impartial manner in which he has presided over the Association during this meeting. We feel that we voice the sentiment of every member of the Association when we state that this has been one of the most successful meetings that the Association has held. (Carried).

TIME OF MEETING

Mr. Wm. Pitkin: At the risk of being thrown out of the convention for bringing up an old, moldy subject, I would like to bring up the matter of the date of the meeting for next year, or a possible change in the date. My excuse is that it seems to be an organization matter, and as a good organization man, I am always willing to do as I am told. It seems there is some question in the minds of the Western men as to the proper date of the meeting. It has been suggested that a good many of our members from the East who would like to go to Portland would find it difficult to get away from home early enough in June if the meeting is called for the usual time, and that the question ought to be referred to the

(Continued on page 260)

VISITING MASSACHUSETTS NURSERIES

At noon on Friday, a party of more than fifty nurserymen left the Hotel Somerset under Vice-president W. H. Wyman's chaperonage for a trip to his nurseries at North Abington, eighteen miles south on the New York, New Haven & Hartford Railroad. In presenting an invitation to the convention to make this trip, Mr. Wyman modestly said that the nurseries were not large; but on the grounds we learned that there are two hundred acres in plants, and that Mr. Wyman also has an interest in a plant-growing establishment at South Framingham, not far off. Near the offices are some seventy-five acres, a large proportion of which is planted to evergreens; half a mile or so from here are ten acres of "herbaceous stuff;" and three miles distant is the Bay State Farm, planted to shade trees and some ornamentals. Mr. Ozroe Wyman, a brother of the proprietor, is the efficient foreman of this section of the nursery.

But to begin at the beginning, we were whirled through the town, which was celebrating the two hundredth anniversary of its founding, in autos immediately upon our arrival, then proceeded to do justice to a substantial meal provided by our host. At the close of this, Mr. John C. Chase of Derry, New Hampshire, started the ball rolling for some speech-making. Mr. Chase said:

It is an old saying that some people are born great, some achieve greatness, and others have greatness thrust upon them. I have been selected to be the goat of the occasion. My emaciated friend from Des Moines intimated to me that if I would break the ice, or set the ball rolling, he would rise to the occasion and become the presiding officer. I think that we should be lacking in appreciation if we did not express ourselves at this time in regard to the attention that has been shown us by Mr. Wyman. And, therefore, Mr. Chairman that I have made, with your consent, I move that the thanks of this body be tendered Mr. Wyman for his attention to us, his bringing us out here, his showing us this delightful old place, and for all that we expect to have after we leave this room; and, in the language of the Oriental, may his shadow never be less.

Mr. Hill: I am quite sure that Mr. Chase has voiced the sentiments and feelings of every man around this board. Possibly many of us are not aware that we are dining near a historical spot, one which has figured very largely in the history and development of this country. We are right now in the territory of the Puritans. I am inclined to think our host is a descendant of these worthy ancestors. We know that he embodies many of the characteristics of these men. Those of us who have had the privilege of purchasing trees from him know that the question of honesty and integrity is maintained in him for which the Plymouth Rock people were noted. Those of us who noticed as we passed along the edge of his nursery know that he has an eye to beauty. We who not only have enjoyed the hospitality of Mr. Wyman today,

but have been enjoying the hospitality of the committee of which he is a member, feel that he has the liberality and the spirit within him which makes him feel that the happiest moments of a man's life are when he is trying to make others happy.

Mr. Chase has very appropriately presented a resolution, which should be adopted by a rising vote. I will ask all who favor the resolution to indicate it by standing.

Mr. Dix: I come from Utah, a long ways off—but after all it isn't so far as it seems. I will say to those of you who hesitate to go to Portland next year, don't get scared before you start. It is only a short journey, and you have three or four opportunities to break it on the way. We have a great country in Utah, and a great people. We have a beautiful valley, and beautiful mountains. The country is very productive.

We have in Salt Lake City the best hotel between Chicago and San Francisco, and I am not afraid to say that it is better than I have yet seen in Boston. I hope to meet you all in Portland next June.

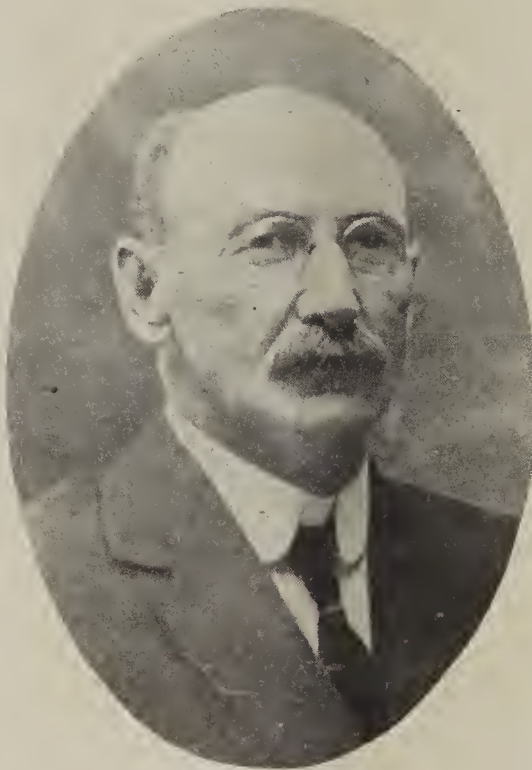
Mr. Hill: I want you to stop in Iowa, because when you are there, you are in the best state in the Union. That is true. We raise in that state three hundred million bushels of corn every year. The worth of our corn product in Iowa is more than the world's output of gold every year. The value of one year's corn crop in Iowa is one hundred seventy-five millions of dollars.

Mr. Wyman: I feel that this afternoon the pleasure is all mine. I don't know when I have ever had the opportunity of seeing in this goodly town such an array of gentlemen from so large an area of country. I can assure you it is a great pleasure. I have a very high respect for the gentlemen of my calling, the nurserymen of the United States. I believe there is no class of men today of higher integrity than the nurserymen.

Before I went into the nursery business myself, I went around selling trees from house to house. I used to hear a great many disparaging things said about nurserymen. I went into the business with the idea that I would try and redeem it.

I went at it, and used as my trademark and on my literature the words, "Value for value." I began to get acquainted with the nurserymen, and I found them a very different class of men from what I had heard them represented. I am happy to say that this is no joking when I say, I believe the nurserymen of this country stand on a level with any other class of men doing business in the United States. I have had dealings with a great many of you, and I have to say that I don't believe there is a firm with whom I do business but is seeking to do the square, manly thing with their fellows.

I say with all truthfulness it is a genuine pleasure to have you here. It is only a young nursery—I established it with my own hands in 1894; but we have some things of interest. I give you the keys to the nursery, and if there is anything you want, take it.



W. H. WYMAN

TOUR AROUND THE GROUNDS

Following these remarks, we started on a tour of the nursery, visiting first the packing house. We were shown the electric motor in the box factory on the second story, and in the main room our attention was called to the little ladders conveniently located at the posts, and to the trolley running around three sides of the room, affording facilities for lowering boxes by a tackle to the first floor with but a few second's work. A spur of the railroad track comes close to this building.

We were shown some imported plants, and of special interest among these was a specimen of *Picea excelsa pumila* which is sixty years old and was imported this year.

Crossing the railroad, we saw a thrifty looking block of young rhododendrons, which are to be protected before the hot weather comes, according to the plan of the Holland nurserymen, by slatted screens about six feet high. Not far from here, Mr. Wyman pointed out a tract which was a forest seven years ago. He said he had used six thousand pounds of dynamite here in clearing nineteen acres.

The young evergreens in this section of the nursery were a delight to the eye. They were of all sizes from a few inches up to as many feet, according to age or variety, and of numerous shades of green, or may we say, in some cases, of blue? A small block of *Pinus mugho* was commented on. These were seedlings. When true to family, they are as broad as tall, but many people prefer the varying forms. Cedars in large numbers and different sizes were called to our attention, also Koster's blue spruce, *Juniperus stricta*, *Taxus cuspidata brevifolia*, and *Biota*. While the junipers are sometimes hard to transplant, they are nearly all hardy in Mr. Wyman's location. During the past winter the temperature dropped to fifteen degrees below zero.

The herbaceous grounds were dotted with many colors, as here and there various plants were in bloom, the names of most of which are a mystery to the layman. The thing which interested us most in this part of the nursery was the large block of German iris. It seems as if there must have been nearly a hundred varieties, giving the appearance at some distance of being purple or yellow, but revealing on closer inspection, many charming tints intermingled with these. Unfortunately a little past their prime at the time of the nurserymen's visit, they yet gave a good idea of what the showing must have been a few days earlier.

A somewhat hurried inspection of the Bay State Farm showed large sized deciduous stock, roses, *Spiraea aurea* with its golden leaves and white blossoms, seed grown *Berberis Thunbergii*, and many other interesting plants. Roses are sold by the firm in large quantities.

Mr. Wyman has the greatest confidence in Mr. Bennett, his superintendent, who was present and assisted in entertaining the visitors. Mr. Bennett was formerly with the W. & T.

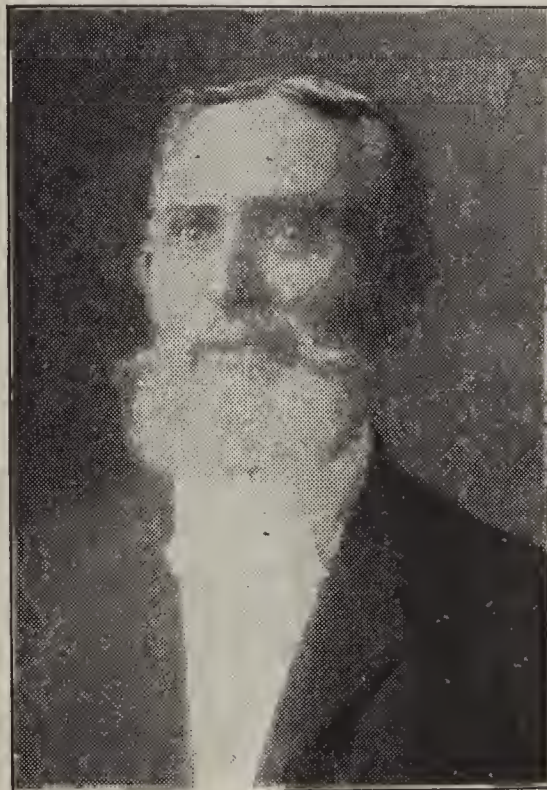
Smith Company of Geneva, but has now been at the Bay State Nurseries for several years. Mr. Wyman says one can't buy land around there without paying an outrageous price. A large territory is covered by the firm's shipments, one order going as far as Alberta this year.

At the close of the afternoon, everyone agreed that we had had a most generous and agreeable host, and the guests returned to Boston with pleasant memories of the day's outing.

Obituary

JAMES J. HARRISON

The older members of the American Association of Nurserymen, while in session in Boston, were deeply stirred by the intelligence that its one remaining charter member had passed away. James J. Harrison, president of the Storrs & Harrison Company, Painesville, Ohio, died in his winter home at Eustace, Florida, Tuesday, June 11.



J. J. HARRISON
Late President Storrs & Harrison Co., Painesville, O.

Mr. Harrison was born in Kent County, England, August, 1829, and had, therefore, reached the ripe old age of eighty-three years. He came with his parents to Ohio in his early boyhood. He was educated in Cleveland, following his common school work with a course in a business college, and later from Hiram College. As a young man, he became interested in plant growth and plant propagation. The gardening instincts of the Englishman were dormant, and the opportunity in the new land for making comfortable homes appealed to him. Among his first experiences was the top-grafting of seedling fruit trees around the homes of settlers in the Middle West. These trips carried him as far south as Georgia and Arkansas about the middle

of the last century. About that time he engaged in fruit growing in Milwaukee, Wisconsin, but in 1856 he established the nursery which has now grown to such tremendous dimensions, by starting the growing of plants and fruit trees on Menton Avenue, Painesville, a place which was afterward known as the Jayne & Cole Nurseries. In 1858 he formed a partnership with Jesse Storrs of North Ridge. They began with a small tract of four or five acres, and this was the firm from which the present huge enterprise of Storrs & Harrison Company, comprising over a thousand acres of cultivated nursery stock, has grown. Mr. Harrison was president of the Storrs & Harrison Company from the time of its organization until the time of his death. During this long stretch of years he was constantly in the harness, although since 1890 he allowed his subordinates to take charge of the more active and strenuous features of the work. Although never a vigorous man, he was one of the most faithful attendants at fruit growers' meetings. In his passing the American Association of Nurserymen loses

its sole charter member. In addition to his interest in the American Association of Nurserymen, he was closely identified with the work of the American Pomological Society, of which organization, if not a charter member, he was one of the oldest. His last attendance at the convention of this Society was at its last meeting in Tampa, Florida.

Mr. Harrison was deeply interested in methods of propagation, in new fruits, and he was extraordinarily well posted in both of these important fields of nursery work.

As a man he was constantly wont to efface himself; in public affairs he liked to work without ostentation, but was always willing to do his part. He was as conservative as retiring. Honesty and integrity were his leading characteristics.

Mr. Harrison leaves two surviving children, Miss Alice A. and Willard C. Harrison, the latter a member of the firm of Storrs & Harrison. He was buried in Painesville on June 14th, his body having been brought there from his winter home in Florida.

GEORGE S. JOSSELYN

The familiar figure of George S. Josselyn was missed at the Boston convention. "Papa" Josselyn, as he was familiarly and affectionately called, has not missed the annual meeting of the American Association for many years. He was down for a paper at this convention and there was keen disappointment expressed at his absence and the cause. Mr. Josselyn died at his home in Fredonia on his seventieth birthday, June 17. He was born in Plymouth County, Massachusetts, in 1842, the son of Stephen and Eliza Studley Josselyn. His father was a shoe manufacturer, and his grandfather served in the War of 1812. George S. Josselyn received an academic education, and at seventeen left his native county for Boston, where he studied civil engineering, and afterwards secured a position in this line with the Erie Railway, having headquarters at Dunkirk, N. Y. He remained in the employ of the Erie Railroad for fifteen years, and for half of that time was roadmaster of the western division of the road. In 1870 he moved to Fredonia, where he first engaged in the poultry business; but in 1878 he became interested in grape culture, and established what afterwards grew to be the largest and best known grape and small fruit nursery in the country.

Mr. Josselyn was instrumental in introducing a considerable number of new varieties of fruits. Probably the most noted of these was the Fay currant. He purchased this on condition that a royalty should be paid to the owners of the currant for a long period of years, and it was said that his sales were so large that over twenty-five thousand dollars were returned to the owners of the currant as a result of his own sales. Among other varieties of small fruits which he was instrumental in popularizing were Campbell's Early and Ohio grape, Moore's Early, and several varieties of

gooseberries, the most noted of which is the Josselyn, so named by the New York Experiment Station at Geneva.

Mr. Josselyn, although a constant attendant at the conventions of the American Association, did so largely for social purposes, stating that when he was away from home on an occasion of this kind, he was in quest of pleasure and recreation and not for business. He was full of quaint humor and a perfect repository of anecdotes and stories.

His genial good humor was always in evidence, and no one who knew him well could fail to recognize his cheerful and philosophic outlook on life.

Mr. Josselyn's name will go down in horticultural history as one who has done a vast amount to further the grape and small fruit interests of this country. As a propagator, as a disseminator, and as a business man and one who developed his business on a thoroughly systematic plan, he will always be recognized as occupying a foremost place. Mr. Josselyn is survived by his wife, who was Miss Mary

White, daughter of Devillo White of Fredonia. Mrs. Josselyn was almost as well known at the conventions of the American Association as her genial husband.



GEORGE S. JOSSELYN

TIME OF MEETING

(Continued from page 257)

Executive Committee for consideration, and with authority to select such date as seems best to the Committee during the second, third, or fourth week of June. If in order, I move the selection of the date for the Portland meeting be referred to the Executive Committee with power to name a date within the second, third, or fourth week of June.

Mr. Hill: While in accord with changing the date of the meeting, I seriously doubt our authority to make this change in the manner suggested. I think the better way for Mr. Pitkin is to submit a resolution amending Article 4 of the Constitution,

setting forth the fourth week, if you desire, instead of the second, as it now stands.

President Dayton: It does seem almost imperative, if we have a representation next year, that for one year we be permitted to hold our meeting a little later.

Mr. Pitkin: If the chair will permit and feels that it is in order, I would ask unanimous consent for the suspension of the rules and the passage of the resolution previously offered.

Mr. Hill: I move the request be granted. (Carried).

(Adjournment).

J. W. Miller of Fremont Mich., C. A. Bennett of Robinsville, N. J., Frank Weber of Nursery, Mo., D. T. McCarthy of Lockport, N. Y., E. S. Welch of Shenandoah, Iowa, called on Rochester Nurserymen and at the office of THE NATIONAL NURSERYMAN the latter part of the week preceding that of the Convention.

C. R. Burr of Manchester, Conn., paid a visit to the Nurserymen of Rochester, Geneva and Dansville, N. Y., after the Convention at Boston. We are always glad to have a visit from Brother Burr.

BOSTON PARKS AND ARNOLD ARBORETUM

Entertainment and Excursions Instructive and Delightful

MR. J. WOODWARD MANNING ASSISTED BY HARLAN P. KELSEY, A. E. ROBINSON,
W. H. WYMAN AND OTHERS, WERE THE MEN "ON THE JOB"

Perhaps the reader would think we were exaggerating if we were to say that there were so many nurserymen with their wives waiting to take the trip through the Arnold Arboretum on Wednesday afternoon that it took all of half an hour to get them seated in the autos provided. At any rate, seven large "rubberneck" machines and more than a dozen touring cars were needed to accommodate the party.

No doubt it was a revelation to many of the visitors to see the miles and miles of tree-lined driveways within the limits of the bustling capital of Massachusetts. Moreover, we were told that the boulevards we passed over constituted but a small part of the great system which has been established and is maintained in Boston by its metropolitan park system. After a ride of some five or six miles, the party reached the entrance to the Arnold Arboretum, where we gathered in front of the administration building to hear brief addresses from some of the officials of the Arboretum. The words of greeting were, in brief, as follows, the speakers being introduced by Mr. J. M. Farquhar.

Jackson Dawson, who is renowned as our greatest plant propagator, said:

I bid you welcome to the Arboretum, and hope you will have a good time here.

We have here tree cuttings gathered from every quarter of the globe, till now we can boast to have the greatest collection of hardy woody plants in the world. I hope you will enjoy yourselves here, and anything we can do to facilitate your stay, we will be very glad to do.

Mr. E. H. Wilson was next introduced as the greatest plant collector the world ever knew. Mr. Wilson said:

"I am delighted to have the pleasure of greeting and helping to welcome you all here. In the absence of my chief, Professor Sargent, I bid you a most hearty welcome. Although you have not the architect of this place here, you have the builder, Mr. Dawson. There are in this Arboretum trees which he has raised from seed or which were seedlings taken from the woods. Some of these trees which Mr. Dawson has watched develop are now sixty feet high and seven feet in girth."

The city was represented by Park Commissioner Shea who extended a warm welcome.

Mr. J. Horace McFarland of Harrisburg, Pa., responded for the Association:

The American Association of Nurserymen is delighted to be received in this fashion, and to accept the welcome you

have given us to the park system of Boston, undoubtedly the greatest in the United States, and to the Arnold Arboretum, undoubtedly the greatest tree garden in the world. In one of Kipling's books, he speaks of one of his characters as the little friend of all the people. It seems to me that among those who have bid us welcome today, I may turn to Mr. Dawson and say he is the great friend of all the nurserymen. As

Mr. Wilson has said, the architect is not here, but the man who built this place is before us. His it has been to see trees grow to grand maturity during his conscious life. He can give the lie to the old story that a man cannot afford to plant a tree. We shall never have any other than the feelings of the greatest gratitude to those who have made it possible for us to avail ourselves of the information worked out in this Arnold Arboretum, the greatest trial ground in all the world.

Returning to our machines, we were taken through winding roads to the top of Bussey Hill, the highest point in the Arboretum. From there we could view the country for miles on every side, as far as the Blue Hills on the west, the nearest approach to mountains that eastern Massachusetts knows.

Stopping close by Hemlock Hill, where the grand old trees seem to be growing right out of the rocks, we got out to inspect at shorter range the wonderful groups of rhododendrons and mountain laurel which border the drive for several hundred feet. The latter was just coming into bloom, and the gradations of color from the deep pink buds to the almost white blossoms were most charming. How shall we describe the magnificent beauty of the rhododendrons? We remember particularly one large plant on which there scarcely seemed to be any leaves, so covered was it with a mass of purple blossoms. The collection of these flowers, on bushes from two to ten feet high, in their great profusion of many colored blossoms is a scene not soon to be forgotten.

The ride continued through Franklin Park, a playground of five hundred twenty-seven acres, for several miles along Columbia Road to Marine Park, thence back to the Hotel Somerset.

Madison, Wis. The Kickapoo Orchard Co., has been incorporated to engage in the orchard and nursery business with a capital stock of \$10,000. The incorporators are: J. C. Schubert, Dr. J. K. Chorlog, and J. A. Harley.—*The Florists' Exchange*.



J. W. MANNING

REPORT OF TRANSPORTATION COMMITTEE

By D. S. LAKE, Chairman

Your committee finds the transportation situation about the same as last year. Few changes have taken place. Uniform classification continues to be the most important question agitating the shippers today, therefore, we will deal with that first. The twenty-fifth annual report of the Interstate Commerce Commission has an article on the subject, also the National Industrial Traffic League, which we reproduce below in full:

UNIFORM CLASSIFICATION

(By the Interstate Commerce Commission)

"What was said in our twenty-fourth annual report on the subject of uniform classification could now be restated as to the present situation, substantial progress along that line having been made by the carriers.

The work is of great importance, involves multitudes of interests, brings out many differing and conflicting views, and is necessarily slow.

This subject has been considered from time to time by the National Association of Railway Commissioners, and that association at its last convention adopted and approved a report of a committee in which it was suggested that in the work of preparing uniformity of ratings for uniform classification by the carriers, much of misunderstanding and many objections which would otherwise arise would be avoided or averted if a representative of this Commission were to sit with the carriers' committee, without vote.

We think that the experiences of the past justify the conclusion that if uniform classification were today agreed upon by the carriers and the shippers, competitive influences and the desire for traffic would soon destroy that uniformity unless it were supported by the force of authority in law to require adoption, maintenance, and observance thereof.

We think also that the stimulus of a mandatory requirement in law should be provided.

We recommend the enactment of a requirement that the carriers shall, within five years from the effective date of such law, provide and adopt a uniform classification and that in the preparation of some one or two representatives of the Interstate Commerce Commission be empowered to require the adoption, maintenance, and observance of such uniform classification on the part of all carriers within the purview of the act, subject of course to such amendments as may be from time to time approved by the Commission."

UNIFORM CLASSIFICATION

(By the National Industrial Traffic League)

"This committee having in mind the action taken by the League at its meeting held in Chicago on July 12, 1910, endorsing a uniform classification as to description of articles, package requirements, minimum weights and rules, with the understanding that the work of the Uniform Classification Committee, together with the proposed changes, would be subject to review and that the shippers would have an opportunity to present their objections, present the following report and recommendations:

It has been the generally accepted idea that the work of the Uniform Classification Committee, when completed in whole or in part, would be submitted to the general shipping public in concrete form, so that

they might know and be fully informed just how commerce would be affected by the proposed changes, and that all would be given an opportunity to be heard before the final adoption thereof.

This is confirmed by the following extract from the report of the Committee on Uniform Classification of the National Association of Railway Commissioners:

(In its 1910 convention, this Association recommended that the Interstate Commerce Commission take the necessary steps to secure at as early a date as practicable such uniformity in classification rules and regulations as the Act to Regulate Commerce makes it the duty of the carriers to establish and observe, and TO GIVE ALL INTERESTED PARTIES AN OPPORTUNITY TO BE HEARD BEFORE THE ADOPTION THEREOF.)

Inasmuch as the work of the Uniform Classification Committee is to submit proposed changes with its recommendations to the several classification committees for adoption, and inasmuch as these recom-

mendations are being quite generally adopted by the Official and Western Classification Committees, not only as to uniformity in the description of articles, package requirements, et cetera, but also as to ratings, and the shipping public is not being afforded a sufficient opportunity to be heard on these matters; and inasmuch as in the Southern Classification territory no knowledge whatever is given to the shipping public as to the proposed changes, and the opportunity afforded for those directly concerned; therefore,

This League enters a protest against the present method of procedure, and recommends that the Interstate Commerce Commission be memorialized, with the view of having that body bring such influence to bear as will result in giving greater and sufficient publicity to the proposed changes in order to secure a uniform classification.

WHEREAS the Uniform Classification Committee submits to the various Classification Committees periodically their recommendations as the work progresses, and as the carriers have seen fit to very generally adopt the recommendations submitted, the shipping interests ask that as the recommendations of the Uniform Classification

Committee are agreed upon that they may be submitted monthly for the consideration of the shipping public by publication in some recognized medium, such as the *Traffic World* and *Traffic Bulletin*, and that the shipping public be given an opportunity TO FILE WITH THE UNIFORM CLASSIFICATION COMMITTEE, IN WRITING, any objections which may present themselves, with causes in support thereof in opposition to the proposed change, for the further information of the committee in making their final recommendations.

It is also recommended that when the report of the Uniform Classification Committee is sent to the carrier for adoption, same be placed in the hands of the shipping public through the medium of a docket in the usual form at least 30 days prior to the meeting of the classification committee before whom same is to be considered.

It is also recommended that the Interstate Commerce Commission arrange that all of the classification committees shall provide for public hearings on all subjects to be considered by the several classification committees at their meetings, and that 30 days' notice be given of the subjects to be considered."

The following on the same subject, is from the railroad news of the *Globe Democrat*, August 14, 1911:

SHIPPERS URGE UNIFORMITY

"An appeal may be made to the Interstate Commerce Commission to hasten the work of obtaining uniform classification of commodities



D. S. LAKE

shipped by freight, according to a report circulated in railroad circles today. Shippers generally, it is said, are dissatisfied with the progress made so far in the direction of uniformity, and point out that at present there is little hope for expecting a completion of the task for a long period of time. The Executive Committee on Uniform Classification has taken the position that it will be necessary to first secure uniformity in rules, descriptions, packages, etc., before attempting to provide a uniform numbering or lettering of classes. The Interstate Commerce commission declared some time ago that unless the railroads completed the work on a uniform classification plan within a reasonable time it would use its influence to further progress along that line."

The descriptions of nursery stock O.K'd by your Transportation Committee and adopted by the Committee on Uniform Classification have now been incorporated in the Western, Official, and Southern Classifications, although in the Western it is not yet in effect, account said classification being under suspension by order of the Interstate Commerce Commission.

The ratings in the Western and Official Classifications, under the new descriptions, remain practically the same, but in the Southern Classification, effective June 17, 1912, the car load rating has been made fifth class, instead of sixth, and less than car load rating in boxes, third class, instead of fourth. While this is an advance in South-eastern territory, there is one good feature about it, and that is the obnoxious required valuation of 3c per pound has been eliminated and hereafter nurserymen throughout the country will not be bothered with any release clause whatever. Your Transportation Committee did not have any notice of this change in the Southern classification territory, as they do not publish any docket like the Western and Official. The following on the subject by the National Industrial Traffic League explains fully:

SOUTHERN CLASSIFICATION, PUBLICITY OF DOCKET

"The president informed the meeting that a petition had been addressed to the Southern Classification Committee asking that that body adopt the same practice which now prevails with the Western and Official Classification Committees of issuing in advance of their meetings a printed docket of the matters to be considered, so that the shipping public might be informed of proposed changes, and where interested could appear before the committee for the presentation of their arguments.

At the time of the meeting advice had not been received from the Southern Classification Committee of the action taken on our petition.

Some discussion was had with reference to the publicity of the dockets of the several classification committees, and the doubt was expressed as to the legal right of the shippers to compel such publicity, or the jurisdiction of the Interstate Commerce Commission over same.

In view of the public interest in all classification matters, it was the sense of the meeting that the widest information possible should be given to proposed changes, especially when the carriers were performing a function delegated to them by the Interstate Commerce Commission in the making of classifications, a power now conferred upon the Interstate Commerce Commission by the new law.

The subject was passed with the understanding that continued efforts would be made toward securing greater publicity."

The above article will show members of the Association what little chance the shippers have of learning of a change until after it has been made.

That Uniform Description of nursery stock is satisfactory to the nurserymen in general is evidenced by some of the

letters we have received on the subject, one of which we reproduce below:

CHASE BROTHERS COMPANY
NEW ENGLAND NURSERIES
ROCHESTER, N. Y.

Feb. 6, 1912.

MR. CHARLES SIZEMORE,
Stark Bros., Louisiana, Mo.

My Dear Mr. Sizemore:

I notice in looking over Official Classification No. 38 that they have finally gotten around to grouping trees, plants, etc., under the heading of "Nursery & Florists' Stock," and this is a move in the right direction, for which no doubt your Committee should have credit.

Yours truly,

WM. PITKIN.

Your Transportation Committee did not attend the Western Classification meeting at Galveston, in January, where they endeavored to have a satisfactory rating adopted to cover apple, and tree seed in car load and less than car load lots. Believe would have been successful had not the meeting adjourned account Interstate Commission's suspending Classification No. 51, which had been approved at the July meeting, and was to have become effective February 15, 1912. However, as this classification is still under suspension, it leaves the old one in effect, and the apple, seed, and tree rating is satisfactory in that.

The following from the railroad news of the *Globe Democrat*, September 12, 1912, will be of interest to shippers:

LIABLE FOR MISROUTING SHIPMENTS

"WASHINGTON, D. C., Sept. 12.—Interstate carriers are responsible in damages to shippers for loss to the latter through the misrouting of shipments. This principle was laid down by the Interstate Commerce Commission today in deciding the case of W. C. Sterling & Co., of Monroe, Mich., against the Michigan Central Railroad, and other carriers. The decision practically reverses a previous holding of the commission that if the shipper accepted a shipment that had been misrouted in violation of his specific instructions, he would be obliged to stand any loss thereby sustained.

In the case decided today the carriers, by misrouting the shipment, forced the shipper to pay drayage charges which would not have accrued."

• LONG AND SHORT HAUL CLAUSE

The fourth section of the Act to regulate commerce, known as the Long and Short Haul Clause, which was carried by the railroads to the Supreme Court of the United States, to test its validity, has not yet been decided by that tribunal. A decision may be expected daily, and if the clause is sustained, which is the general belief, it will mean a thorough overhauling of freight rates throughout the country, as the clause in question absolutely forbids the carrier from charging a higher rate for a shorter than a longer distance, when directly intermediate.

The foregoing covers, in a general way, the traffic situation as gathered by your committee. From what has been said on Uniform Classification, the members of the Association will have a general idea of the progress on that subject up to the present. However, from newspaper information and conversations with railroad men and traffic representatives, we believe the Uniform Classification subject

becomes more muddled as time progresses, and it is your Transportation Committee's opinion that before the case is finally settled, the Interstate Commerce Commission will have to take absolute control, make the classification itself, and force both railroad and shippers to present their own arguments. It seems to be the general opinion that should the Interstate Commerce Commission finally take the matter in hand, that ratings secured by shippers might depend a great deal on political pull, or influence, and that a classification made by them, could not be changed inside of two years. At this writing, there has been no notice of

a Western Classification meeting this summer, and as the work of that committee last summer has been suspended, the chances are against any further meeting until the commission makes their decision on classification No. 51. As stated in previous reports of your Committee, we still recommend the attendance at Classification meetings of one or more representatives from the Nurserymen's Association, thereby not losing any acquaintance, or prestige, that may have been gained by attendance at previous meetings.

Respectfully submitted,
D. S. LAKE, Chairman.

FEDERAL LEGISLATION

By PETER YOUNGERS, Geneva, Neb.

At the annual meeting of the Western Association of Nurserymen held in Kansas City, Mo., in December last, Mr. W. P. Stark, a member of the National Legislative Committee and S. J. Hunter, State Entomologist of Kansas, were requested to take up the matter of Federal Legislation at Washington, with Committees from the Association of Economic Entomologists, Association of Horticultural Inspectors, American Association of Nurserymen, and representatives of the Department of Agriculture. They met with the committees, in view to assist the committee in framing a bill that the committee would mutually agree upon, that would be a safe, sane and practical Federal Inspection Bill. Mr. W. P. Stark and Professor Hunter attended the Conference in Washington.

To these gentlemen, in a large measure, credit is due in preventing the passage of some very drastic measures that would injure the nurserymen of the United States. As Mr. W. P. Stark and Speaker Champ Clark are very good friends, residing in the same county,—with this acquaintance it was not difficult to secure a hearing before the proper Legislative Committee, and having such an able assistant as Professor Hunter, one of the most level-headed entomologists in the United States, and friendly to the nursery interests, to assist in presenting the case from the Entomologist standpoint, made this committee one that would impress any fair-minded body of men. That they asked only what was right and proper in such an important bill to protect the interests of the fruit-grower and nurserymen, in adding these distinguished gentlemen to assist in the work of the committee, we felt that we had added strength, wisdom, and energy to a committee already strong and from reports received from Washington, the combined committees were none too strong to secure legislation or to prevent very drastic measures from becoming a law. There has been a number of bills introduced, withdrawn and amended and the bill now pending may pass the session of Congress.

I believe the Association should positively instruct the Legislative Committee what it wants in line of Federal Legislation and no better time or place than at this meeting could be chosen. If this association is not in favor of any legislation, let us so state, and if we want legislation, tell

the Legislative Committee just what you want and insist that the instructions are followed.

To the Chairman and Members of the American Association of Nurserymen:

As soon as possible after the convention at St. Louis, I commenced to start an action in Montana. After corresponding with the Montana Nursery Co., of Billings, Mont., and also some personal friends, they all recommended W. M. Johnston, of Billings, as the proper attorney to conduct this suit.

I then personally visited Mr. Johnston, and had him prepare an opinion and agree upon a price in the event he had to take the matter through court. Upon submitting this to the executive committee I received word to go ahead.

In October I instructed Mr. Johnston to proceed to test the constitutionality of the law, but it seemed to be impossible to start an action as the Attorney General would not join in the matter, nor would the State Board of Horticulture agree to a test case. Having no case that we could try on its merits, our attorney consulted with the Attorney General and some of the other state officials, and the Attorney General, in a letter to Mr. Johnston, expressed the opinion that the law was unconstitutional.

On December 14th, 1911, The Mount Arbor Nurseries, of Shenandoah, Ia., received the following message:

"Shipment from your house to Montana Nursery Co., Hamilton, being held for license fee. Your license expired April 25th. Send \$25 and avoid injury to stock. Letter follows.

M. L. DEAN.

Mr. Welch immediately notified me of the message and I advised the paying same under protest, and he wrote the following letter:

"Mr. M. L. Dean, Chief Inspector, Missoula, Mont. Dear Sir: In response to your telegram we are wiring you as per copy of message enclosed and herewith enclosed Chicago check for \$25 as referred to in our message. We make this payment under protest as we consider it illegal, but of course, cannot avoid doing so if you demand it and are holding our goods, because the goods are perishable and would be destroyed. According to a former ruling, the shipments made to licensed nurserymen were permitted, although we do not see how you can legally collect license fee on interstate business such as we are doing. I shall be glad to receive full information from you as to the grounds which you base your demands for this license fee. Truly yours,
E. S. WELCH."

In a letter dated Dec. 20th, Mr. Welch received this reply:

Dear Mr Welch:

Appreciating the fact that your order was placed by a licensed nurseryman instead of a regular agent we herewith return your draft. The stock was delivered to consignee at once, he holding it for inspection,

so that there could no harm come to it by the day's delay. Immediately upon receipt of your telegram we phoned our inspector to inspect the goods. Regretting any annoyance caused, I remain,

Yours very truly,

M. L. DEAN,

State Horticulturist.

Mr. Welch informed me promptly that his \$25 had been refunded and enclosed letter from Mr. Dean, and I took it for granted that there would be no further attempt made to collect a license fee from the nurserymen.

January 10th Mr. Dean wrote our attorney a letter, which I will read, showing plainly that there was no need of going to the expense of carrying the matter into the Supreme Court.

Upon receipt of this letter I immediately notified the Trade papers and also sent circulars covering a great many states to notify the proper parties not to pay license. We felt as though we had accomplished a great deal in securing this decision, but later on, when the State Horticultural Society met, they urged Mr. Dean, State Horticulturist, to collect the license, thereby annulling everything that the Attorney General in his opinion, had rendered in our favor. The matter was then again taken up by our attorney endeavoring to get it into the courts, but as yet we have been unsuccessful as they refuse to join us in a suit and as long as the nurserymen will license and there is nothing held up we cannot get into court.

I received a letter from our Attorney dated March 1st, 1912, and also other letters which I will read, showing that the Board had decided that the matter must be handled in the ordinary way through the courts and would not be tried upon an agreed statement of facts.

As we were unable to get into court through any ordinary process of law, Youngers & Co., made a proposition through our attorney, offering to ship 500 trees to anyone in the state of Montana and prepay freight on same the commissioner would agree to hold up the shipment. We were willing to do this in order to get a test case, but they would not agree to hold up the shipment so that we could get the matter into court.

On May 4th I received another letter from our Attorney in which he stated that Mr. Dean had advised him that the State Board had directed him not to aid in any way in getting a case into the Montana courts. This was in reply to our proposition to send 500 trees to anyone who would assist us in getting into court. And this is the condition that we are now in in the state of Montana.

In my judgment the only way is for this Association to refuse to pay license. This could be done in the fall, as there are very few shipments made into the state of Montana in the fall, and I do not believe there would be a single shipment held up as they do not want to get into court, but simply want the \$25 from each nursery.

On January 23d we wrote to W. M. Johnston, our attorney at Billings, Mont., in reference to the Wyoming law, enclosing a letter written by Avon Nelson, Secretary State Board of Horticulture of Wyoming, demanding payment of license by the Mt. Arbor Nurseries of Shenandoah, Ia. which had been referred to me by Mr. Welch.

On Jan. 25th I received reply from Mr. Johnston as follows:

"Your favor of the 23d inst, enclosing a letter of Avon Nelson, secretary Wyoming State Board of Horticulture, received. I think this letter is sufficient grounds upon which to base our actions."

According to previous arrangements with Mr. Johnston, that in the event we won out in the Montana case, he would carry a case through in Wyoming, I advised him that if in his judgment he had a case to go ahead with same, and on Feb. 15th I received a copy of the petition which he had forwarded to the clerk of the court at Laramie, Wyo., for filing. He also wrote as follows:

"The Attorney General has refused to join me in an agreed statement of the case. He says this would be usurping the duties of the county and prosecuting attorneys. I infer from this that he will co-operate with Mr. Nelson in making me all the trouble possible so as to prevent a hearing on this matter on the merits as long as possible. Evidently they will harass and annoy us in every way possible so as to make the foreign nurserymen pay the license each year, even though unconstitutional, in order to stand in with the inspectors of the state. That seems to be the plan as now outlined."

On April 22d I received the following letter from our Attorney W. M. Johnston.

"Your favor of the 20th received. It is difficult to say when I will have a final decision in the Wyoming case. My own judgment is that it will make no difference how that case is determined so far as the Montana license law is concerned. It will be enforced here until our Supreme Court decides it is unconstitutional. The same thing, I believe, applies to Wyoming. I base these statements upon the information I have from the State Horticulturists of each state. I feel sure that they are both satisfied that the law is illegal but they are going to enforce it as long as possible."

This is the condition at the present time of the Wyoming case that we have now filed, and have commenced action in the name of E. S. Welch, who kindly permitted us to use his name in this case.

In the case of Mr. W. C. Reed of Vincennes, Ind., in regard to the Colorado law, will say that the action brought by Mr. Reed for damages sustained by the burning of stock unlawfully, has been taken up and we were informed that the trial would take place in January last. Mr. Reed had made arrangements with witnesses to be present at that time, but the case was postponed until May, and when the proper time came to go to Denver to try the case, he was again notified that it had been postponed, and the date now proposed is some time early in September.

After considerable correspondence it was decided that this case should be tried on the broadest possible lines in order, if possible, to test the constitutionality of the law as well as a damage suit.

In order to bring this case and assist Mr. Reed in every way possible, as we realized that the burden would be too heavy for any one individual, the Western Association at Kansas City, voted to expend \$250 of the Association's funds on this test case. Individual firms and members present added \$650 to this sum.

We were in hopes that this case might have been decided before this time and that we would have some ruling on the constitutionality of the law, but as yet we have been unable to have a trial, but we hope that we will do so in September next.

Do Not Pay License in Montana

GENEVA, NEB., Jan. 12, 1912.

Should any attempt be made to collect license in Montana, wire W. M. Johnson, Atty., Billings, Mont., and also notify me and we will take the matter up at once. Mr. Johnson will now turn his attention to the Wyoming law, and we hope to get good results from that state. If any demand is made in Wyoming for license advise me at once and if any nurseryman has paid license lately advise me promptly and give date so that we can get action promptly.

Respectfully yours,

PETER YOUNGERS,
Chairman.

HELENA, January 3, 1912.

Hon. Chas. A. Taylor,
County Attorney,
Billings, Mont.

Dear Sir:

I acknowledge receipt of your letter of the 28th ult., relating to case proposed to be instituted by Mr. Johnson of that city to test the constitutionality of the law requiring persons, firms, or corporations engaged in the business of selling nursery stock in this State to procure a license.

When Mr. Johnson was in the city a few days ago this question was discussed and it was then thought advisable to have such action instituted in case the State Board of Horticulture demanded the payment of this license nurseries of situated without the State. You are aware of the doubt existing relative to the constitutionality of this part of the statute. However, since the interview had with Mr. Johnson, Mr. M. L. Dean, State Horticulturist, has called at the office and after

discussion of the law he reached the conclusion that he would not any longer make demand for the payment of this license by non-resident nurseries. In view of this fact I can see no reason now existing for the institution of any action whatsoever, for if no attempt is made to enforce the provisions of this law relating to foreign nurseries, then such nurseries are not injured by reason of the mere fact that the law still remains upon the statutes.

I would, therefore, respectfully suggest that no action be brought unless the State Horticultural authorities do make some attempt to enforce this law. Of course, you understand this applies only to the license feature of the law and has no bearing whatsoever upon the inspection of stock shipped into the State, or of the fees, if any, required for that purpose.

Yours very truly,
ALBERT J. GALEN,
Attorney General.

January 11, 1912.

Mr. Peter Youngers,
Geneva, Nebr.

Dear Sir:

Your favor of the 8th inst., received. My recollection is that I have sent you copies of letters and telegrams from Mr. Dean which ought to answer your purposes for publication. If not, advise me as to the date of copies of letters and telegrams of Mr. Dean that I have sent you and I will see if I have any other letters which will be of benefit to you in case you desire to publish same.

I have already written to the Wyoming authorities. As soon as I hear from them will write you again.

Very truly yours,

W. M. JOHNSTON.

P.S.—Since writing the above I have received letter from Mr. Dean, copy of which I herewith enclose.

MISSOULA, MONTANA, Jan. 10, 1912.

Mr. W. M. Johnston,
Billings, Montana.

Dear Mr. Johnston:

I take up your letter of the 3d for reply, and, as you were informed from this office of our action regarding the matter that point is covered.

I can see no reason of going to the expense of carrying the matter to the supreme court, and so have simply ceased to demand the license fees, and no such charges will be made against any outside nurseries who do not have the stock in the state at the time of selling, or when orders are taken.

I shall see you as soon as the weather moderates and we can then talk the matter over.

Yours very truly,
M. L. DEAN,
State Horticulturist.

March 6, 1912.

Mr. Peter Youngers,
Geneva, Nebr.

Dear Sir:

Your favor of the 4th inst. received. Herewith I hand you copy of letter I have this day sent to each member of our Board of Horticulture. I am still hopeful that I may get Mr. Dean to consent to a friendly suit to determine the validity of our license law.

Very truly yours,
W. M. JOHNSTON.

March 6, 1912.

Mr. W. J. Christmas,
Joliet, Mont.

Dear Sir:

As you know, Mr. Dean, State Horticulturist, on the advice of Attorney General Galen and with the approval of Gov. Morris, decided not to attempt to collect any license from outside nurserymen doing business in the state of Montana because both the Attorney-General and the Governor were satisfied that our law was unconstitutional.

As the attorney for outside nurserymen, I had been trying for months to get Mr. Dean to join me in the institution of a friendly suit for the settlement of this question. He finally declined to do so on the advice of the Attorney-General and then advised me that no attempt would be made to collect this license. I so advised my clients. Relying upon this assurance, no further effort was made to test the law in this state. Now, just about the time nurserymen are preparing to fill their orders for the year the State Horticulturist advises me that because of some action taken recently at a meeting at Great Falls he will be compelled to break his promise to me and insist on the payment of this license fee. I do not care so much about that as my clients would be very glad to have the law tested. The part I object to is that Mr. Dean refuses to consent to a friendly suit so that this matter may be determined without any unnecessary delay, expense or cost.

He evidently insists upon harassing and annoying outside nurserymen as much as he can. This will benefit no one but is a very dis-

courteous act on his part to say the least. He however, advises me that he is doing this by direction of the State Board and not of his own volition.

Will you kindly advise me on this matter and state whether or not you are willing that our license law may be tested by a friendly suit so as to avoid the necessity or desirability of having the inspectors jump on to every shipment of nursery stock into this state this year. I want you to understand that I am in no way attacking the inspection laws of Montana, neither are my clients.

An early reply will be greatly appreciated,

Very truly yours,

April 29, 1912.

Mr. Peter Youngers,
Geneva, Nebr.

Dear Sir:

I have received a letter from Mr. Dean in regard to your shipment of stock but he does not answer my question. I have written him again and asked him to give me an answer yes or no as to whether he will interfere with your shipment so that we may test the constitutionality of the law. I fear that he has no intention of doing so.

Very truly yours,

W. M. JOHNSTON.

May 4, 1912.

Mr. Peter Youngers,
Geneva, Nebr.

Dear Sir:

I have just received a letter from Mr. Dean advising me that the State Board has directed him not to aid me in any way in getting a case into the Montana courts, for the purpose of testing our nursery license law. He states that the Board has decided to have the matter changed in the next Legislature, that as practically all nursery stock has been delivered for this year nothing will be gained by suit, and that the matter will be settled before time to deliver stock next year.

Very truly yours,

W. M. JOHNSTON.

J. M. P.—Please read and return to Mr. Youngers for his file, he wishes to embody this letter in his report at the June meeting.

H. B. C.

Business Movements

The William Stark Nursery Company, Chester, Missouri, has recently established itself in the southwest corner of the state, where Mr. W. H. Stark, son of ex-president W. P. Stark, is establishing a nursery plant, in which the following specialties will be grown: Apples, supplemented by a general line of fruit, perennials, including roses and rose stocks, peonies, phlox, and iris. Mr. Stark is of the opinion that his soil is peculiarly adapted to the culture of these plants, and is planning to grow them on a large scale. He is now working on plans and specifications for a concrete storage house as part of his building equipment.

J. E. Dwyer & Co., of Manchester, Conn., have leased the farm of the late Walter Stapelton at Geneva, N. Y., and next season intend to plant a general line of stock on the place.

NOTICE OF DISSOLUTION

This is to say that J. H. Foster has retired from the firm of Foster & Griffith, Nurserymen of Fredonia, N. Y., and that the business will be continued and carried on by R. B. Griffith, the other member of the firm.

I shall give every branch of the business my close personal attention and endeavor to give to all, courteous treatment and a square deal.

I thank you for your patronage in the past and ask for a liberal share in the future.

Yours truly,
R. B. GRIFFITH.

Dated, June 4th, 1912.

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"I can't be without your paper."
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GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.
Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all cleaned and guaranteed
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Vincennes, Ind.

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APPLE—One Year. Cut Backs very strong.

SILVER MAPLE. All grades.

Can furnish the above in Carload Lots or less. Also Pear,
Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa
Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection
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PLANTS**

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Send list of your requirements for lowest prices. Trade list
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Wholesale Seedsmen

Grosstabarz, Germany

Offers of American Tree Seeds appreciated.

Code 5th Edition A. B. C. used.

We hold one of the finest stocks in England of 2 yr.
field grown Hybrid Tea Roses on the seedling
briar, also a large collection of Standard Roses on
briar stock.

Hardy American Rhododendrons of the best
varieties, such as the *Sargents*, *Chas. Dickens*, *E. S. Rand*,
Sefton, *Old Port*, *Everettianum*, *Etc.*, *Etc.* We grow 60
acres of Named Rhododendrons.

250,000 Manetti Stocks first grade, grown on sandy ground and guaranteed
well rooted at bottom of stock.

25,000 Pinus cembra, from 6 in. to 3 ft.

25,000 Andromeda florabunda, in all sizes up to 2 ft.

5,000 Abies parryana Kosteriana from 1 ft. to 4 ft.

Windlesham
Nurseries

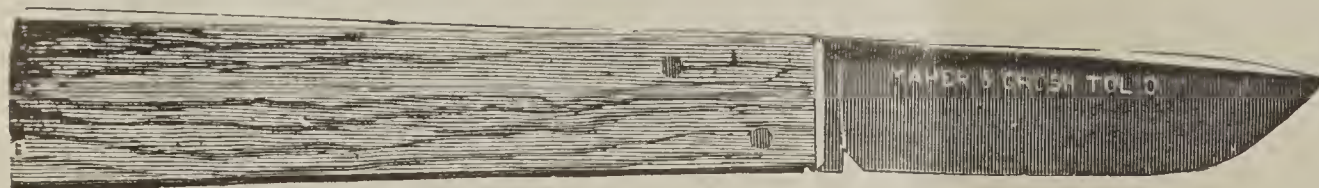
W. FROMOW & SONS

SURREY,
ENGLAND

LEVAVASSEUR & SONS, Nurseries at Ussy and Orleans FRANCE

Wholesale Growers of Fruit Tree Stocks, Ornamentals, Evergreen Seedlings, etc. Best Grading Quality, and Packing.
Largest shippers to this country. All leading nurserymen are our regular customers. Orders booked now for delivery for season
1912 to 1913 at open prices, so as to secure quantities. For further information address our

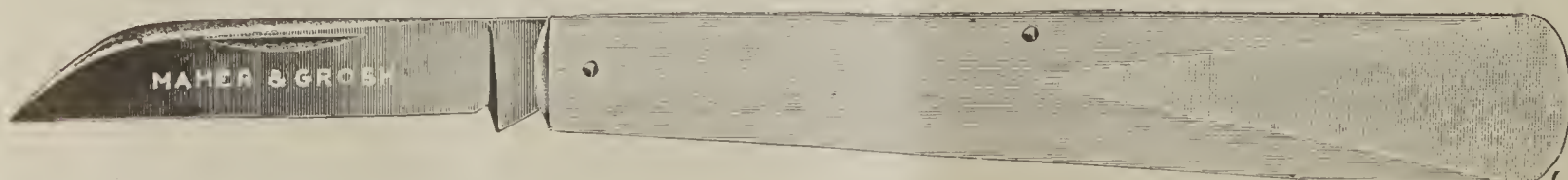
American Agents, AUGUST RÖLKER & SONS, New York, 31 Barclay Street or P O. Box 752.



BUDDING KNIFE, No. 94. Sample by mail, 6 for \$1.25.

NURSEYRMEN'S KNIVES

Hand Forged Razor Steel Warranted



PROPAGATING KNIFE, No. 89½—50c. Blade Closes. You have paid 75c. for a much poorer knife.

90 Adams Street MAHER & GROSH CO., Toledo, Ohio

Nursery Pruner, - 50c.
Pocket Pruner, - 60c.
Pocket Budder, - 35c.
Pocket Grafter, - 40c.

WE SOLICIT
DIRECT TRADE

Send for 12-page Special
Nursery Catalogue.

ORNAMENTAL STOCKS

NURSERIES
420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.
300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
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800 varieties of New and Old Roses.

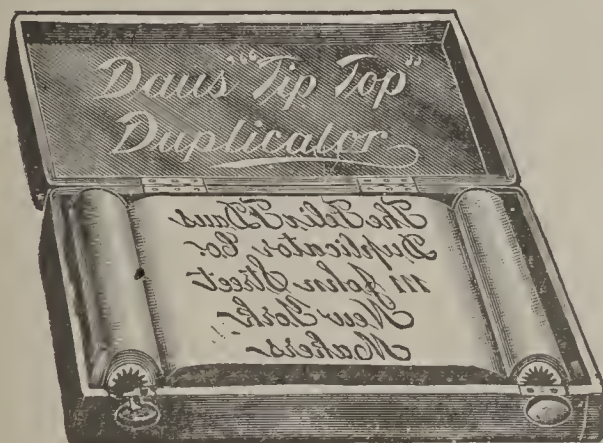
We Have No Agents.
Write direct to us and
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TRANSON BROS & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

BARBIER *and* CO., Successors,

Orleans, France



THERE ARE TWO REASONS

Why we send our Improved Duplicator on 10 Days' Trial

First—It proves OUR confidence in the machine. **Second**—By personal use, YOU can positively tell, before buying, whether it meets your requirements.

Each machine contains 16 feet of duplicating surface which can be used over and over again. Five different colors can be duplicated at the same time. Cleanliness and simplicity of operation and legibility of copies, unequalled by any other duplicating process.

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Complete Duplicator, Cap Size (prints 8 3/4 x 13 inches), Price, **\$7.50** Less Special Discount of 33 1/3% NET - - - - **\$5.00**

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The future bedding rose

"Mevrouw, G. W. Van Gelderen"

(Gloire de Dyon X Captain Christy)

A perfect hardy H. T. Rose; color creamy-rose, very free flowering, a strong grower, also easy to force. Ready for shipment after October 1, 1912.

Paeonia Chinensis "W. Mesman"

(Kersbergen)

Pure white, earliest of all and very free flowering. Ready for shipment September 1912.

V. G.'s SPECIALTIES:

Azaleas, Evergreens, Magnolias, Rhododendrons, Roses, old and new varieties

Upon demand, we will mail you full descriptions with prices of Novelties, and our general price list of Nursery-stock.

G. W. VAN GELDEREN
BOSKOOP, HOLLAND

English Nursery Stock

Extensive stock of *RHODODENDRONS*, English grown, hardy kinds a specialty. These are specially grown for America. Bushy, well-grown plants, budded, 1 1/2 to 2 ft., 2 to 2 1/2 ft., and a few kinds 2 1/2 to 3 ft. *ANDROMEDA*, *AZALEA*, *KALMIAS*, etc., a good stock. *HARDY CONIFERS*, a large stock. Low prices can be quoted on all Conifers. *ORNAMENTAL EVERGREEN TREES*, *FRUIT TREES*, trained and in pots. *TRANSPLANTED FOREST TREES*, *FRUIT TREE STOCKS*, etc.

ROSES, dwarf and standard—all leading kinds in quantity. *MANETTI STOCKS*, 1-yr., fine.

The stock is in excellent condition. *First grade stock only supplied*. Thirty years successful trading in the States. No agents. Write direct for wholesale catalogue.

Walter Charles Slocock
Goldsworth Nursery

Half an hour's rail from London by
L. & S. W. Ry., Main Southampton Line.

WOKING
Surrey, Eng.

EVENING LECTURES

Under the auspices of the Massachusetts Horticultural Society President Dayton presided at interesting lectures presented by Professor F. C. Sears and Dr. Shaw of the Massachusetts Agricultural College on the subject of fruit growing. Stenographic reports of these addresses will appear in our next issue.

H. G. Benckhuysen, representing H. den Ouden & Son, Boskoop Holland, sailed from New York for home on the Lusitania, Tuesday June 18.

Baraboo, Wis.—The nursery business of W. J. Harrison has been purchased by W. M. Allen, manager of the Northwestern Nursery Co. Mr. Harrison retains his strawberry stock, which he will continue to handle, separately.—*The Florists' Exchange*.

WANTED

A first-class up-to-date nurseryman competent to take entire charge of a commercial place doing a general nursery and pot-plant business. Five thousand feet of glass.

Answer, giving full particulars, Box 844, Birmingham, Ala.

WANTED

50,000 Oriental

Plane Cuttings

I shall be pleased to receive by mail a largest and smallest (dry sample) of cuttings offered with lowest prices for fall or early winter delivery.

WM. L. BURTON,
BURTON, LOUISIANA

WANTED AT ONCE

NURSERY MANAGER for Mail Order Business; one who is familiar with conditions in the Northwest. Married man preferred. Good dwelling house on place. Splendid opportunity for the right man with some capital. Apply "K"

Care of NATIONAL NURSERYMAN.

WANTED

First class budders and grafters. Position permanent if can do satisfactory work. Single men preferred.

CALIFORNIA NURSERY CO.
NILES, CALIF.

WANTED

A competent nurseryman for manager and working foreman. Must be honest and capable of handling crew of men. Married man preferred. A permanent position with good wages for the right party. State full particulars and salary wanted in first letter. Address "D.L." care NATIONAL NURSERYMAN, Rochester, N. Y.

WANTED

1000 Cherry $\frac{3}{4}$. Peach in exchange preferred. Also have to offer 17000 Silver Maple 1-2"; Moore Early Grape 1 yr.; Mersereau B. B. root cutting plants; 2000 Houghton Gooseberry Layers; 1000 Peach, extra fine, $\frac{1}{2}$ to 1 inch. Address

THE CREVE COUR NURSERIES, Creve Cour, Mo.

(ESTABLISHED 1859)

W. W. WITTMAN & CO., Baltimore, Md.

Wholesale Dealers in PEACH SEED

Write us for Samples and Prices

YOUR NEXT CATALOGUE

SOME MEN eat Canvass Back Ducks and drink Champaign, but no one ever made their money being extravagant. We do good plain business bringing catalogue work for the bread and butter man while he is earning his money for the future "splurge." Our equipment of cuts is excellent, and our prices the most moderate of any of the firms who can give you a complete service, and we are anxious to quote you a price or make a suggestion on your future printing.

STOCK CATALOGUES

We are preparing to put out the newest and best stock catalogue yet published, and at a moderate price. If you use them let us hear from you.

BENTON REVIEW SHOP

Commercial and Nursery Printers

FOWLER, INDIANA

SOMETHING NEW IN WOOD

TREE LABELS *Iron or Copper Wire, Printed, Painted or Plain.*

We furnish the standard size of printed tree labels
PRINTED ON BOTH SIDES

at the same price now paid for those printed on one side. We also have a **NEW BLANK LABEL** so wired that they cannot drop off. We manufacture Nursery Row Markers, Pointed Labels and Green Tapering Plant Supports.

Our capacity is such that we guarantee prompt shipments. Write for samples and prices giving estimate of number wanted.

ALLEN-BAILEY TAG CO., Inc.,
WEST FRANKLIN STREET DANVILLE, NEW YORK

HILL'S NEW CROP OF TREE SEEDS

Tests show that the Germination is unusually high. Long experience in gathering, extracting, cleaning, drying and storing enables us to supply seeds that are superior to the average. All standard varieties. Ask for what you want—write now.

THE D. HILL NURSERY COMPANY, Inc.

Seed Department Box 601, Dundee, Ills.

COLLECTORS AND EXTRACTORS

Import

Export

ESTABLISHED 1866

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND, VA.

Growers of a general line of

HIGH GRADE NURSERY STOCK

OFFER FOR FALL, 1912, Peach, Pear, Cherry, Plum.
California Privet, 1 and 2-year, extra fine. : : :

SEND US YOUR LIST FOR QUOTATIONS



Partial View of Persimmon Trees in Nursery,
shown in our Retail Catalogue, page 23.

GLEN SAINT MARY NURSERIES CO.
Dept. 3, Glen Saint Mary, Florida

**PERSIMMONS
PRIVET
ARBORVITAE**

**Florida-Grown
True to Name**

Your trade will be quick to see the value of Glen Saint Mary stock—our methods of propagating assure quality and satisfactory results, and much of our product will succeed practically all over the North. Let us know your wants—we'll gladly supply prices and particulars on request.

The **Gardeners' Chronicle**

Established 1841

**IS THE LEADING HORTICULTURAL
JOURNAL IN THE WORLD**

SUBSCRIPTION IN U. S. A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free on application to the Publisher—

**THE PUBLISHERS, 41 Wellington Street,
Covent Garden, LONDON, W. C.**

APPLE TREES

Wealthy, Peter and other leading kinds

SUCCESS CRAB

Trees and Buds. Best nursery tree we have ever grown. Whitney, Transcendent, Strawberry and others.

WILLOW & POPLAR

Trees and Cuttings.

RASPBERRIES. King.

ELMS

All grades up to 10 to 12 ft.

PEONIES

Large assortment.

PLUM. Seedlings

BOX ELDERS ⁵/₆

SNOWBALLS

2 to 3 ft.

Compass Cherry Plum

5-6 ft. For Early or Late Fall Shipment, 1912.

G. D. McKISSON, Prop.

Fairmont Nurseries

FAIRMONT, MINN.

SGARAVATTI BROS.

SAONARA (Padua)

ITALY

GROWERS AND IMPORTERS OF

**Fruit-Tree Seedlings, Forest-Tree Seedlings,
Rose Stocks, Vines**

WE HAVE A LARGE AND FINE STOCK OF

Prunus Myrobolana Seedlings

PRICES ON APPLICATION

P. E. VAN DE LAAN

VEENDAM, HOLLAND

Cable address: Nurseries, Veendam

Begs to inform the trade that he will have to offer next season very large quantities of his well known **FRUIT TREE** and **ROSE STOCKS** of A1 quality.

LARGE STOCK OF

APPLE TREES

One and two year, general list of varieties, strong on commercial sorts.

Also Cherry, Native Plum, Peach, Compass Cherry, Shade Trees, Ornamentals and Nursery-grown Forest Tree Seedlings.

B. E. FIELDS & SON

FREMONT, NEBR.

P-W-R

ARSENATE OF LEAD

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Supplied by Wholesale Druggists and other Dealers throughout the U. S.

Powers-Weightman-Rosengarten Co.

Manufacturing Chemists

FOUNDED 1818

NEW YORK

PHILADELPHIA

SAINT LOUIS

WE ARE way ahead of last year in the volume of our collection business; but still we can do yet more. Do not wait but send us now all your back accounts. Rates and methods on application.

NATIONAL FLORISTS' BOARD OF TRADE
56 Pine Street, NEW YORK

PEACH SEED

1911 and 1912 STOCK

Write for Sample and Prices

THOS. R. HAMAN, 1614 E. Oliver St., Baltimore, Md.

Olympic Nature Nursery THE FOREST CONSERVATORY

WILD FRUITS, PLANTS AND FLOWERS.

Blueberries, Blackberries, Raspberries, Salmonberries, Salalberries, Oregon Grapes, Rhododendrons, Ferns, Spireas, Trilliums, Evergreens and other native plants. Collected fresh from the forest. For sale or exchange. Catalogue on request.

JOEL SHOMAKER, Nellita, Washington

APPLE, PEAR, PLUM, CHERRY SEEDLING STOCKS AND ROSA CANINA

Grown by **DOORNBOSCH & SON**, *Seedling Specialists*, Veendam, Holland, are second to none.

We are now booking, at special quotations, contract orders for 1912-13 delivery. Contract orders are open until February 15, 1912. Get our prices, they are reasonable.

THE HORTICULTURAL CO., Worcester, Mass. **SOLE AGENTS FOR DOORNBOSCH & SON** Veendam, Holland

We still have a few apple seedlings on hand of 5-7 mm, 7-10 mm, and 7-12 mm. **GET OUR SAMPLES.**

LET ME QUOTE YOU prices on all Conifers and Broad-leaved Tree and Shrub Seeds. Guaranteed fresh, true to name and good germination.

J. F. Von HAFFTEN, Consulting Forester
WINFIELD JCT., L. I.

HENRI SCHRAVEN

Lottum, near Venlo, - - - - HOLLAND

ROSES AND FRUIT TREES NURSERIES. The best and cheapest address for all sorts of Rose Stocks, Fruit Trees, Gooseberries and Currant Shrubs.

DELIVERY AND PAYMENT according to usual commercial conditions.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our **HOLLAND NURSERIES**. Some of the goods on hand here during the packing season.

EASTERLY NURSERY CO.

CLEVELAND, TENN.

OFFER FOR SPRING, 1912

One and two year Apple; One year and June Bud Peach; California Privet, in car-load lots. Also Magnolia, Grandiflora, Arbor-Vitea, Norway Spruce, Md. Plantier, and Baltimore Bell Roses. Ask for prices.

BOX STRAPS

AND CAR SEALS

WARD-DICKEY STEEL COMPANY

Manufacturers of Planished Sheet Steel
INDIAN HARBOR, IND.

ROSES

2½-inch pots for lining out.
4-inch, 2-yr., semi-dormant.

225 Sorts
Old Tried
New True

THE LEEDLE FLORAL COMPANY
SPRINGFIELD-OHIO.

TREE SEEDS

Large assortment of Tree, Shrub and Fruit Seeds for ornamental and forestry purposes. Send for catalogue.

CONYERS B FLEU, Jr.
GERMANTOWN, PHILA., PA

PECAN TREES

Write us for prices of well grown vigorous pecan trees of the leading commercial varieties. We have them.

STANDARD PECAN CO.

H. S. WATSON, Manager. **Monticello, Fla.**

C. KERKVOORDE WETTEREN (BELGIUM)

Established 1860

Indispensable address for letters: C. Kerkvoorde, Wetteren.
Telegrams: Kerkvoorde, Wetteren.

ROSES (every year 500,000) 2-year field-grown plants, all on briar. Novelty of Roses. Hybrid Rhododendrons, named, best varieties, Azalea Indica, Begonia Bulbs, Conifers, Fruit Trees, Forest Plants, Norway Maples, Grape Vines, potgrown 3 years, Ornamental Trees and Shrubs, and all general Nursery Stock. **SOLE AGENTS FOR AMERICA:**

A. RÖLKER & SONS, 31 Barclay St., New York. P.O. Box 752

Peach Trees and Strawberry Plants

all leading market sorts for Spring, 1912

MYERS & SON, Bridgeville, Del.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.

LOUISIANA, MO.

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GRIMES GOLDEN
INDIAN
JONATHAN
M. BLUSH
N. W. GREENING
PEWAUKEE
RAMBO
ROME BEAUTY
STARK
STAYMEN'S W. S.
TULPEHOCKEN
WINESAP
YORK IMPERIAL

PEACH

CARMAN
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EARLY CRAWFORD
LATE CRAWFORD
O. M. FREE

PLUM

BURBANK
ABUNDANCE
MOORE'S ARCTIC
REINE CLAUDE
SHIPPER'S PRIDE

CHERRY TREES

FOR SALE IN CARLOAD LOTS

MONTMORENCY
BALDWIN

E. RICHMOND
DYE HOUSE

ENG. MORELLO

APPLE SEEDLINGS
STRAIGHT ROOTS

$\frac{3}{16}$ -in. up.
Price very reasonable

C. M. HOBBS & SONS

BRIDGEPORT, : : INDIANA

We have every facility for growing evergreens from seed—*plus* the finest natural location that we know of in the United States, *plus* over 50 years' practical knowledge of how to do it best. We are now growing millions of them

for nurserymen's and dealers' trade, lining out, etc., and you will find

Hill's Evergreens

the best investment you can make—if you are looking toward permanent results and satisfied customers, as well as the first cost of the trees. We go to a great deal of trouble and expense gathering and sowing our seed, but we think it's worth it all to know that the little trees are true to name, and healthy and vigorous. Our customers, too, have found that it's worth the cost to know that they're getting *reliable* trees when they buy here. If you want the best evergreens you can get for your trade let us tell you more about those of "Hill Quality."

THE D. HILL NURSERY CO., Inc.

Evergreen Specialists

D. HILL, President Box 401, DUNDEE, ILLINOIS

Highland Nursery

Headquarters for Hardy American
Broadleaved Evergreens

This means those finest of all native American shrubs—

RHODODENDRONS

AZALEAS

KALMIAS

and the like. Try us on handsome

Carolina Perennials

One of our specialties collected at 3800 feet elevation. We have outgrown our Salem nurseries and will be found with plenty of ground for field expansion at Boxford, Mass.

HARLAN P. KELSEY

SALEM, MASS.

This is Why Harrison's Trees "Make Good" Wherever Planted

A Pennsylvania nurseryman recently bought eleven hundred apple and peach trees from Harrison's and planted them in his own orchard. All but three are alive and in first-class growing condition at this time.

The reasons for this remarkably large percentage are found in the care we give the trees from the minute the seedlings are budded to the day the trees are packed for shipping.

The soil here is loose, rich loam, encouraging great root growth. The atmosphere is moist from ocean's breezes, and the salt air imparts vigor to the foliage and seems to keep it free from insects and disease.

Ten hundred and ninety-seven thriving trees are 1097 reasons why you should furnish such stock to your trade. It will mean satisfied customers, increased business and more money for you.

The list below will give you an idea of what we have for fall delivery—but this is only a partial list, and if your wants cannot be supplied here don't hesitate to write us.

APPLES

One Year Budded

American Golden Russett.....	1200
Alexander	1200
Baldwin	27000
Ben Davis.....	7000
Benoni	250
Belleflower.....	300
Bismarck	100
Coffelt Beauty.....	100
Cooper's Market.....	100
Carthouse	150
Chenango Strawberry.....	225
Dominie	250
Duchess	6500
Delicious	275
Ensee	300
Early Colton.....	125
Early Harvest.....	3000
Early Strawberry.....	250
Fall Pippin.....	250
Fanny	100
Fallowater	750
Fourth of July.....	1000
Fameuse	1200
Grimes' Golden.....	10000
Gravenstein.....	2500
Golden Beauty.....	250
Gano	6000
Ingram	200
Jeffries	100
Jonathan	7000
Kennard's Choice.....	150
King	2500
Longfield	100
Lankford	75
Lawver.....	100
Limbertwig	150
Myrick	275
Missouri Pippin.....	300
Mammoth Black Twig.....	12000
Mann	100
McIntosh Red.....	10000
Maiden's Blush.....	650
Nero	1400
Northern Spy.....	3000
N. W. Greening.....	1500
Porter.....	100
Pewaukee	80
Paradise Winter Sweet.....	1100
Rome Beauty.....	16000
Rawles Janet.....	150
Red Astrachan.....	4000
Rolfe	175
Red June.....	250
R. I. Greening.....	1200
Rambo	1200
Stayman's Winesap.....	60000
Starr	2200
Smoke House	1000
Smith's Cider.....	250
Scott's Winter.....	200
Salome	150
Springdale	150
Stark	3000
Sweet Bough.....	1000
Spitzenburg	1250
Tallman's Sweet.....	1000
Wealthy	8000
Walbridge	250

APPLES—Continued

Winesap	16000
Wolf River.....	3000
William's Early Red.....	3000
Winter Banana.....	3500
Wagner	900
York Imperial.....	60000
Yellow Transparent.....	16000

CRAB APPLES

Hyslop	275
Martha Crab.....	250
Transcendent	2000

APPLES

Two Year

Aiken	50
A. G. Russett.....	400
Arkansas Black.....	200
Apple of Commerce.....	40
Baldwin	12000
Ben Davis.....	4000
Bismarck	30
Benoni	40
C. R. June.....	400
Carthouse	40
Coffelt	25
Cooper's Market.....	50
Canada Red.....	25
Chenango	50
Dutchess	2500
Dominie	50
Early Strawberry.....	200
Early Harvest.....	2500
Early Melon.....	40
Fallowater	500
Fanny	20
Flora Bell.....	40
Golden Sweet.....	150
Gravenstein.....	2000
Hubbardston.....	1000
Ingram	40
Jeffries	40
King	150
Kinnards	40
Lawver.....	150
Longfield	30
Late Raspberry.....	45
Jonathan	1250
Missouri Pippin.....	900
Mann	400
Myrick	50
Nero	1500
N. W. Greening.....	2500
Opalescent	75
P. W. Sweet.....	450
Paynes	40
Pewaukee	50
Rambo	500
R. I. Greening.....	2500
Roman Stem.....	30
Red Astrachan.....	4000
Sweet Bough.....	50
Smith Cider.....	400
Stark	1500
Spitzenburg	2500
Salome	25
Senator	35
Sutton Beauty	25
Springdale	30

APPLES—Continued

Townsend	40
Virginia Beauty.....	50
Walbridge	200
Wealthy	2500
Wolf River.....	1250
Winesap	4000
Winter Banana.....	750
Yellow Transparent.....	15000
Yellow Belleflower.....	500
York Imperial.....	25000

CRAB APPLES

Golden Beauty.....	1000
Hyslop	750
Transcendent	1000

QUINCES

Champion, 2-3 ft.....	500
Orange, 2 3 ft.....	500

CHERRIES

Two Year

Baldwin	1000
Black Tartarian.....	1500
Early Richmond.....	10000
Gov. Wood.....	1000
Montmorency	4000
Napoleon	1000
Schmidt	1000
Windsor	1000
Yellow Spanish.....	1000

PEACHES

One Year from Bud

Arp Beauty.....	300
Alexander	200
Admiral Dewey.....	200
Belle of Georgia.....	25000
Beer Smock.....	2500
Bilyeu's Late.....	2500
Bray's R. R.....	250
Crosby	200
Connett's So. Ey.....	200
Captain Ede.....	200
Cornelia	50
Chinese Cling.....	250
Carman	15000
Chair's Choice.....	5000
Champion	5000
Crawford Early.....	2500
Crawford Late.....	5500
Elberta.....	70000
Edgemont Beauty.....	500
Engles Mammoth.....	1500
Ford's Late White.....	1000
Frances	1500
Fitzgerald	1500
Foster.....	500
Fox Seedling.....	3000
Geary's Hold On.....	2000
Gold Drop.....	250
Globe	300
Greensboro	2500
Heiley	1500
Harrison Cling.....	250
Iron Mountain.....	3000
Jackson Cling.....	200

PEACHES—Continued

Klondyke.....	500
Krummel's Oct.....	950
Kalamazoo	1250
Levy's Late.....	200
Late Elberta.....	250
McCollister	200
Miss Lola.....	175
Mountain Rose.....	2000
Moore's Favorite.....	1500
Mamie Ross.....	1000
Mayflower	1400
Matthew's Beauty.....	200
Marshall	200
New Prolific.....	1000
Niagara	1500
Old Mixon Free.....	500
Picquetts Late.....	250
Prize	250
Reeve's Favorite.....	2500
Ray	25000
Sneed	200
Sunrise Cling.....	250
Stinson's Oct.....	250
Salway	6000
Stump	3500
Stephen's Rareripe.....	1300
Slappey	1500
Triumph	150
Wilkin's Cling.....	1100
White Heath Cling.....	1200
Wonderful.....	2500
Willett	200
Walker's Free.....	250
Yellow St. John.....	1000

PEARS

Two Year

Kieffer	8000
Bartlett	5000



In addition to these Fruit Trees we have a large stock of Maples, Catalpas, Black Walnuts, Spruces, American Arborvitae, Roses and Shrubs. Send us your list and let us tell you what we can do for you.

Harrison's Nurseries

J. G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



THE NATIONAL NURSERYMAN



AUGUST, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.

MONROE, MICH.

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SPIRAEA VAN HOUTTEI
by the thousand.

Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

APPLE AND JAPAN PEAR SEEDLINGS

We are ready to quote prices for future delivery.

*Large line of General Nursery Stock of superior
quality for Wholesale Trade.*

CORRESPONDENCE AND INSPECTION INVITED

THE JEWELL NURSERY CO.

LAKE CITY, MINNESOTA

Wholesale Nurserymen

Established 1868

1500 Acres

SPECIALTIES FOR FALL 1912

NORWAY AND CAROLINA POPLAR

2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8, 8 to 10, 10 to 12 ft.

BOX ELDER, ASH, ELM AND MAPLE SEEDLINGS
all sizes.

100,000 CURRANTS, Red and White.

75,000 McINTOSH, JONATHAN, BELLFLOWER,
WINESAP, Etc., 2-year, fine stock.

THREE YEAR APPLE in all Hardy Varieties.

THREE YEAR CRAB
SNOWBALL

YELLOW DOGWOOD
HYDRANGEA

WRITE FOR SPECIAL PRICES.
LET US PRICE YOUR GENERAL WANT LIST.

Now is the time to place your orders for
Direct Importations

from European Nursery Centers

FRENCH FRUIT STOCKS

Apple, Pear, Myrobolan, Mahaleb, Mazzard Seedlings, Manetti, Multiflora and Quince stocks. Also full line of Ornaments for lining out, from Vincent Lebreton's Nurseries, Angers. Best packing and grading. December or February shipment from France.

Boskoop, Holland, Nursery Stock

Boxwood (pyramids, bushes, standards, ball-shape, etc). Roses, Tree Roses, Rhododendrons, Azaleas, Magnolias, Koster Blue Spruce, Evergreens, Hydrangea P. G., etc., etc., from Schaum & Van Tol, Boskoop.

DECIDUOUS TREES

Norway and Schwedler Maples, Tiliac, Elms, Chestnuts, Oaks, Planes, Thorns, etc., etc., etc., straight stems and good roots, careful selection, best packing from Union Nurseries, Oudenbosch, Holland.

Besides representing the above firms as Sole American Agents, we import to order

FROM JAPAN AND ENGLAND

English Manetti, Gooseberries 2 and 3-yr. (Whinham Industry, Whitesmith, etc.), Japanese Nursery Stock and Lilies.

BAY TREES. Standards, Pyramids and all shapes from Belgium, Fall or Spring shipment.

RAFFIA. Red Star Brand and four other grades; also dyed Raffia in 20 colors.

WRITE US for catalogs, special lists, etc., stating the class of stock you are interested in.

SHIPPING. We have our own Custom House Dept., with shipping connections at Havre, Hamburg, Rotterdam, Antwerp, Southampton, etc.

McHutchison & Co.

17 Murray St.
New York

The Import
House

SIMPSON

is the name of the men who grow the finest

CHERRY

that can be produced by suitable soil, climate and expert knowledge.

Take a look at the stock or ask for a sample and be convinced of the extra quality of their

TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year

AMERICANA PLUM ON PLUM

COMPASS CHERRY ON PLUM

H.M. Simpson & Sons

VINCENNES, INDIANA

For Winter and Spring Orders

**WE OFFER THE FOLLOWING FROM
OUR MAC CLENNEY NURSERY . . .**

4000 Mulberries, mostly of Hicks variety, smooth and free from blight.

15000 Figs, mostly of the Celeste and Lemon varieties.

20000 Peach, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.

25000 Plum on Plum, Abundance, Burbank, Wickson, Red June, Gonzalez, and other leading sorts. Sizes $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ and 1 inch.

10000 Roses, Teas, Hybrid Teas and Climbers, all grafted very low on Manetti roots. Field grown.

6000 Biota Aurea Nana, sizes 18 inches up.

10000 Biotas and other Conifers, 12 inches and up. Conifers can be balled or shipped with naked roots.

25000 Chinese Arborvitae Seedlings, 2 and 3 year, 6 inch to 3 ft. sizes.

5000 Muscadine Grapes.

20000 Trellis Varieties Grapes.

70000 Camphor Trees, sizes 1 to 3 ft.

3000 Pot Grown Eucalyptus, sizes 3 to 5 ft.

4000 Oriental Plane, sizes from 4 to 12 feet.

3000 Texas Umbrella, sizes from 4 to 8 feet.

2000 Oleander. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.

Could also supply limited quantities of general list of Fruit and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

The Griffing Brothers Company

JACKSONVILLE, FLORIDA



NURSERYMEN AND FLORISTS

looking for stock can find largest assortment
in the United States at the

Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and
Evergreens, Hardy Roses, Vines and Plants,
Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,
Palms and other tender Greenhouse Plants.

Have a large stock stored in frost-proof cellars that can be
shipped at any time desired; switch from N. Y. C. lines
direct into our packing house; can load without exposure.
Unsurpassed facilities for handling orders large or small.

ROSE HIAWATHA

== CATALOGS AND PRICE LISTS FREE ==

A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment

DUCHESSE DWARF PEARS

BOURGEAT QUINCE

PRUNUS PISSARDI and TRILOBA

CUTHBERT and other RASPBERRIES

CONCORD and other GRAPES

OUR SPECIALTIES ARE :

Roses, H. P. Moss, Ramblers, Climbers, etc.,
Peaches, Pears, Plums, Cherries, Ornamental
Trees and Shrubs in car lots, Weeping Mulberries,
Elm and Ash, Clematis, Ampelopsis, Paeonies,
Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

FOR FALL, 1912

AMERICAN

ELMS...

Norway Maples

SPLENDID TREES

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

TREE LILACS

Grown as STANDARDS with strong, straight stems and well-branched, well-balanced tops; forty varieties, single and double, all shades from purest white to darkest purple. A profitable *specialty* for agency and catalog houses.

J. & P. Tree Hydrangeas were the first home-grown standards on the market. Our **Tree Lilacs** are becoming even *more* popular.

Electros free for use in advertising. Special prices to large buyers of TREE LILACS.

Other shrubs also grown as STANDARDS, like **Snowballs**, **Weigelas**, **Spireas**, **Forsythias**—very special stuff for high-class retail trade. We, ourselves, sell at wholesale only and to nurserymen and florists exclusively.

Jackson & Perkins Company

Growers of the J. & P. Specialties
Sold to the Trade only

NEWARK, NEW YORK

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our **Biotas**—**Aurea Nana**, **Aurea Conspicua**, and **Japonica Filiformis** (see illustration); **Retinospora**, **Thuja**, and **Juniper**—all in popular sizes for the trade.

Our **Deciduous Shrubs** include **Exochorda**, **Lilac**, **Spirea**, **Althaea**, **Deutzia**, **Philadelphus**, and a very choice stock of **Teas' Weeping Mulberry**.

Broad-leaved Evergreens—**Azalea Indica** (Home-grown Plants) **Magnolia Fuscata**, **Aucuba**, **Ligustrum**, and **English Laurel**. Among our fruits, we direct particular attention to our clean, thrifty **Peach Trees**, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.
INCORPORATED

Fruitland Nurseries
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.

CONIFERS
BROAD-LEAVED
EVERGREENS
DECIDUOUS
SHRUBS
WEEPING
MULBERRY
PEACHES
OTHER FRUITS



Biota Japonica Filiformis.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.

LOUISIANA, MO.

You ought to visit our Nurseries and see us growing "baby evergreens" by the million to properly appreciate what patience and experience and special skill it takes to do the job right.

This month is a splendid time to see things at their best, and nurserymen in attendance on the S. A. F. & O. H. Convention at Chicago are invited to

Visit Our Nurseries and Inspect Our Evergreens

of which we have millions always coming on—ranging from little fellows in the seed-beds to big, handsomely developed specimens.

Dundee is conveniently reached by train and trolley from Chicago, and visitors will be made welcome at any time. But if you cannot come, don't let that keep you from getting in touch with us by mail. We have the stock that you need, and we are anxious to show just what we can do for you. Drop a line for our 1912 Wholesale Catalog with prices and all particulars.

THE D. HILL NURSERY CO., Inc.
Evergreen Specialists

D. HILL, President

Box 401, Dundee, Illinois

BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings

Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

C. M. HOBBS & SONS

BRIDGEPORT, IND.

WILL BUD ON CONTRACT

50,000

PEACH TREES

IN CARLOAD LOTS

Good Shipping Facilities.

Railroad Siding on Nursery
Grounds.

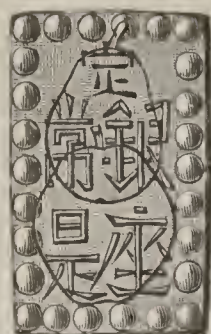
**The Adams County
Nursery....**

H. G. BAUGHER, Proprietor

BENDERSVILLE STATION

Aspers Postoffice, Pa.

Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Fall of 1912 and Spring of 1913 in large quantities as usual:

SPECIALTIES.

APPLES—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.

PEARS—Kieffers, one and two years old. A much smaller crop than heretofore.

CHERRIES—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.

CHERRIES—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

ROSES—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

PRIVET—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.

PECAN SEEDLINGS—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,
in several hundred
kinds and varieties

ROSES, in all kinds
and varieties

RHODODENDRONS, Hardy,
ENGLISH HYBRIDS,
Maximum and Catawbiense

BOXWOOD, in all shapes,
forms and sizes

HARDY AZALEAS, in all
colors and varieties

HEDGE PLANTS, in all
popular kinds

FLOWERING SHRUBS, in
bush and standard forms
in hundreds of kinds
and varieties

SHADE TREES, in hundreds
of useful and attractive
varieties

MAGNOLIAS and other
FLOWERING TREES

WEeping and STANDARD
TREES, in many varieties

JAPANESE MAPLES, in all
varieties and colors

HARDY TRAILING VINES
and CLIMBERS

HARDY VINES and CLIMBERS
in pots

SPRING and SUMMER
FLOWERING BULBS, ROOTS
and PLANTS

PALMS and BAY TREES by
the thousands

FRUIT TREES,
home-grown, imported,
DWARF and TRAINED

SMALL FRUITS, in all
kinds and varieties

NUT TREES, profitable
kinds

OLD-FASHIONED, Hardy
FLOWERING PLANTS, in
thousands of kinds and
varieties

PAEONIAS, IRIS, PHLOX
FERNs,
and HARDY GRASSES

KITCHEN
HERBS and ROOTS

RUTHERFORD PARK LAWN
GRASS SEED

AUTUMN BULBS, Dutch,
French and Japanese kinds

Interior and Exterior
DECORATIVE PLANTS, in
a large variety

PLANT TUBS, in all shapes and
sizes. Ask for special list

VISITORS to our nurseries
are always welcome

SEND IN YOUR LISTS FOR
QUOTATIONS

Nurserymen, Florists and Planters
RUTHERFORD, N. J.

RAFFIA

We offer four brands of Raffia that are especially adapted to meet the different requirements for which Raffia is used.

“RED STAR” BRAND

“ARROW” BRAND, “XX SUPERIOR”

“AA WESTCOAST”

With these brands we are in a position to offer both price and quality that will interest you. Send for our price list giving complete description and price of each brand.

We also offer a good line of Budding Knives. List upon request.

THOMAS MEEHAN & SONS

DIRECT IMPORTERS OF RAFFIA

DRESHER, PA.

L. Spaeth

BERLIN
Baumschulenweg
GERMANY

Largest Nurseries
in Europe

2000 ACRES

FOUNDED 1720

HARDY TREES
AND SHRUBS

1. Our nurseries lie in a colder
climate than the French, Dutch
and English nurseries—

2. We grow all the stock we sell—

3. Moderate prices.

Catalogs free—

4. When in Europe come and see
our nurseries—

PLANT FOR PROFIT

Berberry Thunbergii Seedlings
Our Great Specialty

Other Items in Large Lots. Write for
Special Quotations

California Privet	-	-	-	2 yr.
Berberry Thunbergii	-	-	-	3 yr.
IN ALL GRADES				
Rhubarb	-	-	-	1 yr.

C. R. BURR & CO.
MANCHESTER, CONN.

FOREST TREES FRUIT STOCKS

Shipments of over 200 Million of
Trees Annually

♦ ♦

J. HEINS' SONS

HALSTENBEK, No. 152

Near Hamburg, Germany

Largest Forest Tree Nurseries in Europe.

Please write for Catalogue and Forest
Planter's Guide to our American Agent:

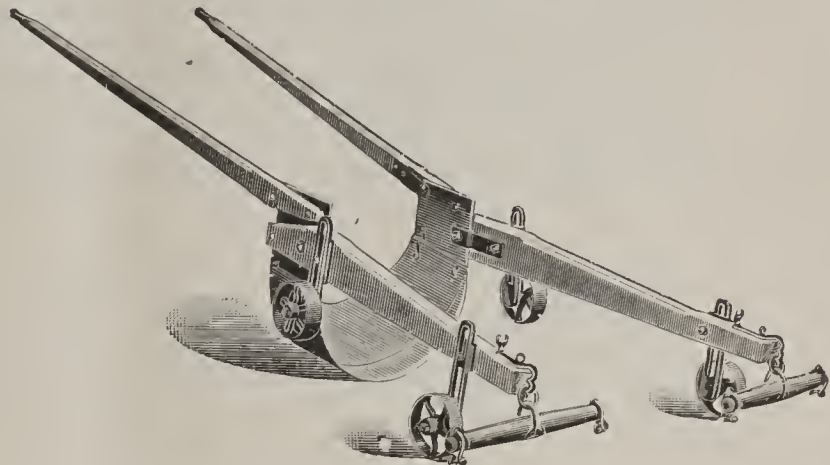
OTTO HEINECKEN

116 Broad St.
NEW YORK CITY

1857 - 1912

BRAGG'S COMMON SENSE TREE DIGGER

REPAIRS ALWAYS ON HAND. SEND FOR CATALOGUE



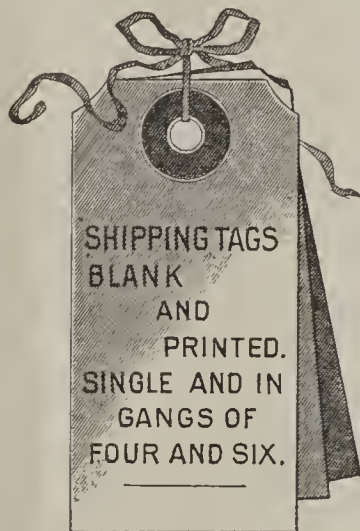
Digger gets all the roots at the rate of
20 to 40 thousand trees per day, and only
needs same power as plow.

L. G. BRAGG & CO.
KALAMAZOO, MICH.

Have you seen and examined the quality and
finish of our

Rawhide Brand of Shipping
Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the
most severe usage, being thoroughly
waterproof & weather-proof. "Once used,
always used."

Send for samples and
prices. Our reference
are the largest nursery
men in the United
States.

The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

35TH YEAR
Pan Handle Nurseries

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

J. K. HENBY & SON
 GREENFIELD, IND.

TREE SEEDS

FRESH AND NATIVE GROWN

Write for prices and place your orders early

The North-Eastern Forestry Co.
 NEW HAVEN, CONNECTICUT

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
 South Canal St., Dayton, Ohio

**Ornamental Trees, Shrubs,
 Evergreens, Vines, Etc.**

HIGH
 GRADE



LARGE
 VARIETY

Correspondence solicited. Price list upon request.

W. B. WHITTIER & CO.
 South Framingham, Mass.

WE OFFER FOR FALL, 1912,

Peach Trees in car lots

NORWAY MAPLE
 SILVER MAPLE

CALIFORNIA PRIVET,
 1 year

325,000 APPLE, 1 year, grafts and buds,
 in COMMERCIAL VARIETIES

The Greenbrier Nursery Co., Inc.
 Greenbrier, Tenn.



Everything in

SMALL FRUIT PLANTS

100,000 Transplanted Raspberry Plants

Ask for price list.

W. N. SCARFF, New Carlisle, O.

FOREST TREES

SEEDLINGS AND TRANSPLANTS

in quantities for retimbering or lining out; healthy stocks, from the very extensive and well kept Wholesale Nurseries of

H. H. PEIN, Halstenbek, Germany

for latest trade list and all other inquiries address our sole American agents:

August Rölker & Sons
 P. O. Box 752, or
 31 Barclay Street
 New York



Small Fruit Plants for the Nursery Trade, Fall 1912

Blackberry Rootcutting Plants, Eldorado, Erie, Ohmer, Rathbun. Raspberry, all leading varieties. Houghton Gooseberry Plants. Two hundred thousand Gooseberry Layer Plants. Asparagus, one, two and three year roots. One hundred thousand Rhubarb, one and two year roots, also divided. Horseradish Sets, etc. Write for Price List. **P. D. BERRY, Dayton, Ohio**



“MAKE-GOOD” CATALOGUES

We'd like to send you a copy of the book—beautifully illustrated in colors—the introduction of which is reproduced on the other side of this sheet. Fill out and mail the coupon below, and it will come to you by return mail.

THE MCFARLAND ORGANIZATIONS

Mount Pleasant Press, Harrisburg, Pa.

J. HORACE MCFARLAND COMPANY
Constructors of Catalogues

THE MCFARLAND PUBLICITY SERVICE
Builders of Business

THE MCFARLAND ORGANIZATIONS
HARRISBURG, PENNA.

Gentlemen: I am a FLORIST.
NURSEYMAN.
SEEDSMAN. Send me your book “Make-Good” Catalogues.

Name _____

Local Address _____

Post Office _____

State _____

“Make-Good” Catalogues



THE real value of a catalogue depends upon what it *produces* rather than upon its *first cost*. There must be a proper relation, of course, between cost and production.

McFarland catalogues have completely proved their *economy*, when judged on the basis of cost *and* production rather than upon cost *only*. The ever-increasing number of florists, nurserymen and seedsmen who use them year after year is ample demonstration of this fact.

“Make-good” catalogues, of which the McFarland output affords so many examples, *owe their superior efficiency to the messages they carry* and the way in which these messages are put before the public. The study of these specimen pages will suggest the reason why.

For many years the catalogues made by the J. Horace McFarland Company admittedly have been *the standard in the selling literature* of the plant, nursery and seed trade. Such skill has been expended in making them that, whenever copy with proper selling power has been supplied and the books have had the right kind of distribution, they have shown maximum effectiveness.

Layout that is pleasing and attractive, *illustrations* which help to create the buying impulse for the goods described, *display* that rivets attention on the most important items offered for the consideration of the reader, *type* for the text which is easily read and which is so arranged as to make the most economical use of *space*, clear and distinct *press-work*, and various other elements of carefully *planned* and well-done printing, have co-operated in giving McFarland catalogues their *reputation as business builders*.

With the establishment of The McFarland Publicity Service, some five years ago, the application of the McFarland idea in catalogue-making was given a much wider range. The help in the *planning of campaigns*, in the preparation of copy and in attention to the *distribution and follow-up of catalogues on scientific lines* which this organization gives horticultural tradesmen, affords a selling service more comprehensive and more complete than is to be had in most other lines of business.

The McFarland Publicity Service has been able to *greatly reduce the editions* of catalogues used by many of its customers, through a better handling of their advertising and the elimination of “dead wood” from their mailing-lists. It has been equally successful in *cutting down the number of pages* in the catalogues of several of its clients by careful revision and condensation of the descriptive matter, thus making possible the use of better illustrations and better printed books at no greater cost. It has succeeded in largely increasing the selling efficiency of catalogues by intelligent follow-up.

While the first cost of McFarland catalogues is frequently higher than the prices of ordinary printers, when the comparison is made on the basis of a given number of pages and a given number of copies, each year adds to the number of McFarland clients *who have found in actual experience that they are the cheapest in the end*. With a mechanical equipment that is constantly undergoing sharp scrutiny and improvement, with the experience of years in making books that are models in form and appearance, and with complete facilities for supplying all forms of service which enter into productive selling literature, the McFarland Organizations have no hesitancy whatever *in undertaking to get a larger return in business* from the catalogue appropriation of any florist, nurseryman and seedsman than he can obtain from the same expenditure in other directions.

The McFarland Organizations, Harrisburg, Penna.

J. Horace McFarland Company
Engravers, Printers and Binders

The McFarland Publicity Service
Practitioners of Selling Science

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., AUGUST, 1912

No. 8

AN EXHAUSTIVE INQUIRY INTO THE PRESENT STATUS OF CHERRY CULTURE IN THE UNITED STATES, EXCLUSIVE OF CALIFORNIA

Success in Cherry Culture Depends upon Good Culture, Suppression of Enemies, Development of Canning Establishments, and Employment of Packing Methods

1. IS CHERRY PLANTING ON THE INCREASE, IS IT STATIONARY, OR IS IT DECREASING IN YOUR LOCALITY?

CONCENSUS:—
THERE SEEMS TO BE DISTINCT INCREASE IN THE PLANTING OF SOUR CHERRIES IN WESTERN NEW YORK FOR CANNING PURPOSES, AND OF SWEET CHERRIES IN THE PACIFIC NORTHWEST FOR FRESH CONSUMPTION AND FOR CONSERVES. IN NEW ENGLAND, MICHIGAN, AND OTHER REGIONS WHERE CHERRIES HAVE BEEN STAPLES IN THE PAST, THERE IS LITTLE MOVEMENT.

Stationary.
BARNES BROS.
NURSERY CO.
Yalesville, Conn.

Cherry planting but little considered in the state. I know of but one orchard recently planted.
Storrs, Conn.

Increasing.
Cayuga, N. Y.

Stationary.
Dansville, N. Y.

A slight increase, although there are not many cherry orchards around this vicinity, on account of the good land being devoted to the growing of nursery stock.

Dansville, N. Y. MALONEY BROS & WELLS CO.

In our judgment, cherry planting is about stationary. We simply judge by the demand we have for trees. This is a poor orchard section, and very few trees are planted near us.

Dansville, N. Y.

A. G. GULLEY.

H. S. WILEY.

W. H. HARTMAN.

MOREY & SON.

Planting is decidedly on the increase, but neglect of trees, etc., is as bad as ever.
Westfield, N. Y.

JOHN W. SPENCER.

Increasing, but not extensively.

GEO. A. SWEET,
Dansville, N. Y.

Increase.
U. P. HEDRICK,
Geneva, N. Y.

Increasing—more are planting every year.

W. & T. SMITH CO.
Geneva, N. Y.

We think cherry planting is on the increase in our locality.

C. M. HOOKER
& SONS,
Rochester, N. Y.

Very little being planted.

D. R. PEASE,
Trumansburg,
N. Y.

A marked increase.

Brown's Nurseries, Ont. BROWN BROS. CO., Ltd.

Very few cherries planted in this locality. Trees are short lived.

Augusta, Ga.

P. J. BERCKMANS CO.

Increasing to date.
Painesville, O.

W. B. COLE.

Increase.
Monroe, Mich.

I. E. ILGENFRITZ' SONS CO.

The planting in 1912 was much less than for the two or three years directly preceding and is likely to be still further reduced.

East Lansing, Mich.

L. R. TAFT.

About stationary.
Bridgman, Mich.

C. E. WHITTEN.



EARLY RICHMOND—THE SOUR TYPE

About stationary, increasing slightly.
South Haven, Mich. FRANK A. WILKIN.

Planting about stationary in this locality, but wholesale trade promises to increase. Cherry crop fair and prices very high for fruit.
Vincennes, Ind. W. C. REED.

There are very few cherry orchards in this vicinity. Think the planting is on the increase. We grow the trees in the nursery, and the demand seems to be increasing.
Vincennes, Ind. H. M. SIMPSON & SONS.

Cherry planting is on the increase. Not enough raised for home demand or home market.
THE COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.

Increase.
Sturgeon Bay, Wis. A. L. HATCH.

Normal.
Princeton, Ill. ARTHUR BRYANT & SON.

Increasing, decidedly.
Des Moines, Ia. WATROUS NURSERY CO.

We are having a splendid crop this year and had a good one last year, which made good returns to the planter.
Des Moines, Ia. WRAGG NURSERY CO.

Stationary.
Parsons, Kans. E. P. BERNARDIN.

Three and four years ago large increase in cherry planting. Last two years about stationary.
Salt Lake City, Utah. UTAH NURSERY CO.

Trifle below stationary.
Roy, Utah. DAVIS CO. NURSERIES.

Increasing in nearly all sections—especially in Willamette Valley of Western Oregon and south of the Dalles in Eastern Oregon.
Portland, Ore. J. B. PILKINGTON.

The cherry planting is increasing very rapidly in the past five years.
Sunnyside, Wash. THE SUNNYSIDE NURSERY CO.

2. IS THE FRUIT GROWN FOR THE CANNING FACTORY, OR IS IT SHIPPED TO PUBLIC MARKETS?

Mostly home use, very little for commercial purposes.
Yalesville, Conn. BARNES BROS. NURSERY CO.

Only for home use, or lightly for market. I think there is no cannery in Connecticut.
Storrs, Conn. A. G. GULLEY.

Canning factory.
Cayuga, N. Y. H. S. WILEY.

Shipped to public markets.
Dansville, N. Y. W. H. HARTMAN.

Home consumption uses it all.
Dansville, N. Y. MALONEY BROS. & WELLS CO.

Both, but mostly for canning factory.
Dansville, N. Y. GEO. A. SWEET.

Canning factory mostly.
Geneva, N. Y. U. P. HEDRICK.

Canning factory.
Geneva, N. Y. W. & T. SMITH CO.

The fruit is grown almost exclusively for canning.
Rochester, N. Y. C. M. HOOKER & SONS.

Both.
Trumansburg, N. Y. D. R. PEASE.

Most of the demand for cherries is on the part of the canneries.
Westfield, N. Y. JOHN W. SPENCER.

The quantity required by canning factories is on the increase.
Brown's Nurseries, Ont. BROWN BROS. CO. LTD.

For local consumption only.
Augusta, Ga. P. J. BERCKMANS CO.

Both, large quantities being canned in northern Ohio.
Painesville, O. W. B. COLE.

Half canning, half market. Some fancy in 10 pound boxes.
Monroe, Mich. I. E. ILGENFRITZ' SONS CO.

While a considerable per cent is sold to canning factories, most of it is shipped to the large cities.
East Lansing, Mich. L. R. TAFT.

Market.
Bridgman, Mich. C. E. WHITTEN.

Mostly for canning factories.
South Haven, Mich. FRANK A. WILKIN.

Most fruit grown for local market. There is some shipping, but no canning factory demand.
Vincennes, Ind. W. C. REED.

Here the home market consumes it all. In many sections, the cannery takes the bulk of the crop.
Vincennes, Ind. H. M. SIMPSON & SONS.

For home market and home demand. No canning factories.
THE COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.

Large plantings made for canning but present crop grown for market.
Sturgeon Bay, Wis. A. L. HATCH.

The bulk for local use, a small per cent shipped.
Princeton, Ill. ARTHUR BRYANT & SON.

Public markets altogether.
Des Moines, Ia. WATROUS NURSERY CO.

Very little of the crop is canned here at the present time, as the cherry belt is so limited that there is a great demand for cherries in the Dakotas and Minnesota, and same are shipped in large quantities during the cherry season.
Des Moines, Ia. WRAGG NURSERY CO.

Shipped to public market.
Parsons, Kans. E. P. BERNARDIN.

Both.
Salt Lake City, Utah. UTAH NURSERY CO.

Public markets.
Roy, Utah. DAVIS CO. NURSERIES.

Both for canneries, and for shipment to eastern markets. Eastern Oregon cherries are all sent to middle and western states, except their Royal Annes, which now come to Portland for canning or packing in brine.
Portland, Ore. J. B. PILKINGTON.

In localities of canneries, there is a certain amount grown for canning purposes. The large percentage of stock grown is for eastern shipment.
Sunnyside, Wash. THE SUNNYSIDE NURSERY CO.

3. WHAT CLASS OR CLASSES OF CHERRIES ARE MOST POPULAR?

CONCENSUS: THE SOUR CHERRY STILL MAINTAINS ITS POPULARITY AS A MONEYMAKER; ONLY ON THE PACIFIC COAST DOES THE SWEET CHERRY REMAIN IN THE ASCENDANT.

Sweet.
Yalesville, Conn. BARNES BROS. NURSERY CO.
Sour cherries only. Sweet cherries seem almost im-
possible to grow.
Storrs, Conn. A. G. GULLEY.
Sours.
Cayuga, N. Y. H. S. WILEY.
Sour cherries.
Dansville, N. Y. W. H. HARTMAN.
Sour cherries.
Dansville, N. Y. MALONEY BROS. & WELLS CO.
Montmorency, Early Richmond, Wragg, Black Tar-
tarian, Napoleon, Governor Wood, Windsor, Bing, and
Lambert.
Dansville, N. Y. MOREY & SON.

Sour.
GEO. A. SWEET,
Dansville, N. Y.
Sour cherries.
U. P. HEDRICK,
Geneva, N. Y.
Sours.
W. & T. SMITH CO.
Geneva, N. Y.
The sour cherries
are most popular.
C. M. HOOKER
& SONS,
Rochester, N. Y.

Sour.
D. R. PEASE,
Trumansburg, N. Y.
Montmorency is
the most popular
variety. I have
May Dukes, Early
Richmonds, Mont-
morency, and Enl-
gish Morello, to the extent
of several tons of
each, and Mont-
morency carries them
all, the pit being
small and the flesh
large.

Westfield, N. Y. JOHN W. SPENCER.
Sours.
Brown's Nurseries, Ont. BROWN BROS. CO. LTD.
Hearts when procurable. A few are grown in the neigh-
borhood of Bath, S. C., about seven miles from Augusta.
Augusta, Ga. P. J. BERCKMANS CO.
Sour cherries are the most used. Sweet cherries are
much in demand, but hard to obtain.
Painesville, O. W. B. COLE.
Both Morello and Heart.
Monroe, Mich. I. E. ILGENFRITZ' SONS CO.
Fully ninety per cent are of sour (Morello) varieties.
East Lansing, Mich. L. R. TAFT.
Early sour.
Bridgman, Mich. C. E. WHITTEN.
Early Richmond and Montmorency.
Fort Atkinson, Wis. THE COE, CONVERSE & EDWARDS CO.

Sour.
South Haven, Mich. FRANK A. WILKEN.
Early Richmond and Montmorency, English Morello
and Wragg.
Vincennes, Ind. W. C. REED.
In this section sours only are planted.
Vincennes, Ind. H. M. SIMPSON & SONS.
Red sour.
Sturgeon Bay, Wis. A. L. HATCH.
Morello type.
Princeton, Ill. ARTHUR BRYANT & SON.
Morello type.
Des Moines, Ia. WATROUS NURSERY CO.
Sour cherries of the Morello type.
Parsons, Kans. E. P. BERNARDIN.

The varieties of
cherries that are giv-
ing the best results
are the Early Rich-
mond, Wragg, and
large Montmorency.
WRAGG NURSERY CO.
Des Moines, Ia.

More sweets than
sours.
UTAH NURSERY CO.
Salt Lake City, Utah.

About equal
between sweets and
sours.
DAVIS CO. NURSERIES
Roy, Utah.

Sweets, 95 per cent
of total.
J. B. PILKINGTON,
Portland, Ore.

The sweet varieties
are the most popular
class of cherries as
they are more
profitable for ship-
ping, and there is a
greater demand for
same.

Sunnyside, Wash. THE SUNNYSIDE NURSERY CO.

4. WHAT VARIETIES AMONG SWEETS ARE LEADERS?

CONCENSUS: AMONG THE MOST POPULAR SWEET VARIETIES ARE: WINDSOR, BLACK TARTARIAN, GOVERNOR WOOD, IN THE EAST, AND BING, LAMBERT, and QUEEN ANN.

Black Tartarian, Windsor, Governor Wood, Schmidts, and Napoleon.
Yalesville, Conn. BARNES BROS NURSERY CO.

If any, should name Windsor and Black Tartarian.
Storrs, Conn. A. G. GULLEY.

Napoleon, Windsor, and Downer's Late.
Dansville, N. Y. W. H. HARTMAN.

Governor Wood, Black Tartarian, Napoleon.
Dansville, N. Y. MALONEY BROS. & WELLS CO.

Black Tartarian, Napoleon, Bing, and Lambert.
Dansville, N. Y. MOREY & SON.



WINDSOR—A POPULAR SWEET VARIETY

Napoleon, Black Tartarian.
Dansville, N. Y. GEO. A. SWEET.

Yellow Spanish, Napoleon, Schmidts, Bigarreau.
Geneva, N. Y. U. P. HEDRICK.

Windsor.
Geneva, N. Y. W. & T. SMITH CO.

Napoleon and Windsor.
Rochester, N. Y. C. M. HOOKER & SONS.

Tartarian and Windsor.
Trumansburg, N. Y. D. R. PEASE.

I fancy the Windsors and Yellow Spanish are the most popular sweets. I would advise sparse planting of either of them. The Windsors may be considered the leader.

Westfield, N. Y. JOHN W. SPENCER.

Very limited demand for sweets in Canada.
Brown's Nurseries, Ont. BROWN BROS. CO. LTD.

Governor Wood and Black Tartarian.
Augusta, Ga. P. J. BERCKMANS CO.

Napoleon, Black Tartarian, Governor Wood, in order named.

Painesville, O. W. B. COLE.

Windsor, Schmidts, Royal Ann, Black Tartarian.
Monroe, Mich. I. E. ILGENFRITZ' SONS CO.

Black Tartarian, Schmidt, Bigarreau, and Windsor.
Bing and Lambert of the new kinds are being considerably planted.

East Lansing, Mich. L. R. TAFT.

Windsor and Napoleon.
South Haven, Mich. FRANK A. WILKEN.

Bing, Lamberts, Black Tartarian, and Schmidts.
Vincennes, Ind. W. C. REED.

We grow largely of Bing, Lambert, Napoleon, Windsor, Black Tartarian, Elkhorn, and Northport. No sweets planted in this section.

Vincennes, Ind. H. M. SIMPSON & SONS.

None.
THE COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.

Some Late Duke are grown. Few sweets planted here.
Sturgeon Bay, Wis. A. L. HATCH.

Sweets do nothing with us.
Princeton, Ill. ARTHUR BRYANT & SON.

None.
Des Moines, Ia. WATROUS NURSERY CO.

All sweets worthless in this section.
Parsons, Kans. E. P. BERNARDIN.

Napoleon, Bing, Lambert, and Black Tartarian.
Salt Lake City, Utah. UTAH NURSERY CO.

Bing, Lambert, Napoleon, and Windsor.
Roy, Utah. DAVIS CO. NURSERIES.

(1st) Royal Anne (Napoleon Bigarreau); (2d) Bing;
(3d) Lambert.
Portland, Ore. J. B. PILKINGTON.

The leading varieties for general market purposes are as follows: Bing 50 per cent, Lambert 25 per cent, Royal Anne 25 per cent. All other varieties are only used in home orders.

Sunnyside, Wash. THE SUNNYSIDE NURSERY CO.

5. WHAT VARIETIES AMONG SOURS ARE LEADERS?

CONCENSUS: OF THE SOUR VARIETIES LARGE MONTMORENCY IS THE UNDISPUTED LEADER IN THE NORTHEAST, WITH ENGLISH MORELLO AND RICHMOND FOLLOWING IN ORDER.

Early Richmond, Montmorency, English Morello.
Yalesville, Conn. BARNES BROS. NURSERY CO.

Montmorency, English Morello, and Early Richmond.
Storrs, Conn. A. G. GULLEY.

Montmorency.
Cayuga, N. Y. H. S. WILEY.

Large Montmorency, Early Richmond, and Dyehouse.
Dansville, N. Y. W. H. HARTMAN.

Montmorency, Early Richmond, English Morello.
Dansville, N. Y. MOREY & SON.

Montmorency, Early Richmond, English Morello.
Dansville, N. Y. GEO. A. SWEET.

Montmorency, English Morello.
Geneva, N. Y. U. P. HEDRICK.

Montmorency, and Morello.
Geneva, N. Y. W. & T. SMITH CO.

Montmorency, Early Richmond, and English Morello.
Rochester, N. Y. C. M. HOOKER & SONS.

Montmorency and Morello.
Trumansburg, N. Y. D. R. PEASE.

I have already indicated that the Montmorency is the leader among sour.

Westfield, N. Y. JOHN W. SPENCER.

Large Montmorency two to one against Early Richmond, which is the second best seller in sour.

Brown's Nurseries, Ont. BROWN BROS. CO. LTD.

Morello, English Morello, and Richmond.
Augusta, Ga. P. J. BERCKMANS CO.

Montmorency, Early Richmond, in order named.
Painesville, O. W. B. COLE.

Montmorency and English Morello.
Monroe, Mich. I. E. ILGENFRITZ SONS CO.

Montmorency, English Morello, Early Richmond, and Dyehouse.

East Lansing, Mich. L. R. TAFT.

Early Richmond and Montmorency.
Bridgman, Mich. C. E. WHITTEN.

Montmorency and Early Richmond.
South Haven, Mich. FRANK A. WILKEN.

Early Richmond and Montmorency.
Vincennes, Ind. W. C. REED.

Early Richmond, Montmorency, and English Morello.
Vincennes, Ind. H. M. SIMPSON & SONS.

Early Richmond and Montmorency.
THE COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.

Early Richmond and Large Montmorency.
Sturgeon Bay, Wis. A. L. HATCH.

Richmond, Montmorency, and English Morello.
Princeton, Ill. ARTHUR BRYANT & SON.

Early Richmond and Montmorency.
Des Moines, Ia. WATROUS NURSERY CO.

Early Richmond and Montmorency.
Parsons, Kans. E. P. BERNARDIN.

Large Montmorency, Early Richmond, May Duke.
Salt Lake City, Utah. UTAH NURSERY CO.

Royal Duke, May Duke, Large Montmorency, English Morello, Early Richmond, "Sixteen to one."
Roy, Utah. DAVIS CO. NURSERIES.

Kentish, both Dukes, Montmorency.
Portland, Ore. J. B. PILKINGTON.

For home planting the largest sales are the Early Richmond, Late Duke, and English Morello.
Sunnyside, Wash. THE SUNNYSIDE NURSERY CO.

6. WHAT VARIETIES DO THE CANNERIES PREFER?

CONSENSUS: AS A CANNING VARIETY MONTMORENCY IS AGAIN THE LEADER.

Montmorency.
BARNES BROS. NURSERY CO.
Yalesville, Conn.

Montmorency, English Morello, and Early Richmond.
A. G. GULLEY,
Storrs, Conn.

Montmorency.
H. S. WILEY,
Cayuga, N. Y.

Large Montmorency.
W. H. HARTMAN,
Dansville, N. Y.

Montmorency and Morello.
MALONEY BROS. & WELLS CO.
Dansville, N. Y.

As we understand it, Montmorency and Napoleon.
MOREY & SON,
Dansville, N. Y.

Montmorency, Morello.
Dansville, N. Y.

Montmorency mostly.
Geneva, N. Y.

Montmorency and Morello.
Geneva, N. Y.

Montmorency and English Morello for sour, and Napoleon for sweet.
Rochester, N. Y. C. M. HOOKER & SONS.

Windsor and Montmorency.
Trumansburg, N. Y. D. R. PEASE.

The Montmorency is the favorite with the canneries.
Westfield, N. Y. JOHN W. SPENCER.

Large Montmorency.
Brown's Nurseries, Ont. BROWN BROS. CO. LTD.

None canned here.
Augusta, Ga. P. J. BERCKMANS CO.

Montmorency and English Morello.
Monroe, Mich. I. E. ILGENFRITZ' SONS CO.

Do not know. Use mostly sour sorts, as these are about the only kinds grown.
Painesville, O. W. B. COLE.

Montmorency and English Morello of the sour sorts, and Black Tartarian, Schmidt, Bigarreau, and Windsor, Bing and Lambert, together with Napoleon and Governor Wood.

East Lansing, Mich.

L. R. TAFT.

Montmorency.
South Haven, Mich.

FRANK A. WILKEN.

Montmorency.
Vincennes, Ind.

W. C. REED.

Early Richmond and Montmorency.
Vincennes, Ind.

H. M. SIMPSON & SONS.

Early Richmond and Montmorency.
THE COE, CONVERSE & EDWARDS CO.
Fort Atkinson, Wis.

Early Richmond and Large Montmorency.

A. L. HATCH,
Sturgeon, Bay Wis.

No canneries here.
ARTHUR BRYANT & SON,
Princeton, Ill.

No canneries.
WATROUS NURS'Y CO.
Des Moines, Ia.

None in this section.

E. P. BERNARDIN,
Parsons, Kans.

Napoleon, Montmorency, May Duke, Royal Duke, "Sixteen to One."
DAVIS CO. NURSERIES
Roy, Utah.

Royal Anne, especially for making Maraschino cherries.

Total output of this variety contracted at 80 per ton to the grower on five year contracts.
Portland, Ore. J. B. PILKINGTON.

The canneries prefer the Royal Anne, as it is a light-colored cherry, and is also used in preserving. The Bing and Lambert both can well.

Sunnyside, Wash. THE SUNNYSIDE NURSERY CO.

7. WHAT TROUBLES DO YOU EXPERIENCE IN CHERRY CULTURE?

CONSENSUS: CHERRIES BOTH SWEET AND SOUR ARE ATTACKED BY BROWN ROT, APHIS, LEAF SPOT, AND BLACK KNOT. BIRDS OFTEN MAKE SERIOUS INROADS AS THE CROP IS RIPENING. CANNERIES OCCASIONALLY EXPERIENCE DIFFICULTY IN SECURING PICKERS.

Brown rot and birds.

Yalesville, Conn.

BARNES BROS. NURSERY CO.

Birds, monilia, and failure of sweet varieties to grow at all.

Storrs, Conn.

A. G. GULLEY.



NAPOLEON, A FAVORITE ON THE PACIFIC COAST

GEO. A. SWEET.

U. P. HEDRICK.

W. & T. SMITH CO.

None in particular at present.
 Dansville, N. Y. W. H. HARTMAN.

Montmorency and Morello.
 Dansville, N. Y. MALONEY BROS. & WELLS CO.

Birds and worms.
 Dansville, N. Y. GEO. A. SWEET.

Securing pickers; rot, leaf spot.
 Geneva, N. Y. U. P. HEDRICK.

There are less troubles in growing sour cherry than in any other fruits we know of.
 Geneva, N. Y. W. & T. SMITH CO.

Our greatest trouble has been the late frost, or rains at time of blossoming.
 Rochester, N. Y. C. M. HOOKER & SONS.

Getting good help to handle the crop is the most serious trouble.
 Trumansburg, N. Y. D. R. PEASE.

We have less trouble in cherry culture than with any other fruit raised in the Lake Erie Valley. I have to spray but once in the spring for immunity from worms. Only sweet cherries are likely to have the scale. It amounts to this, if I spray in the spring at the time the blossoms fall, with a good fungicide and insecticide, and do my work thoroughly, I have very clean and luscious fruit, both sweet and sour. As to profit, I have neighbors who raise grapes skinned alive. Many of them look upon my efforts as a joke, but when I attend a horticultural meeting and urge them to participate in the joke they do not take me very seriously.
 Westfield, N. Y. JOHN W. SPENCER.

Picking.
 Brown's Nurseries, Ont. BROWN BROS. CO. LTD.

Hearts and Bigarreus are short lived and very seldom set fruit. Common Morello is the best—next English Morello and Richmond.
 Augusta, Ga. P. J. BERCKMANS CO.

Very little trouble with sour sorts. Sweet cherries are most susceptible to rot, frost injury, depredation by insects and birds.
 Painesville, O. W. B. COLE.

Least of any fruit. Some years black aphids.
 Monroe, Mich. I. E. ILGENFRITZ' SONS CO.

Leaf-spot is the disease which does most harm where the trees are not sprayed. The cherry slug and plum curculio are troublesome, but are easily controlled.
 Eats Lansing, Mich. L. R. TAFT.

Frost at blooming and birds at ripening.
 Bridgman, Mich. C. E. WHITTEN.

Birds and leaf blight trouble the growers here the most. Very little trouble of any kind with some kinds, if sprayed.
 South Haven, Mich. FRANK A. WILKEN.

With thorough spraying, results are satisfactory.
 Vincennes, Ind. W. C. REED.

Early Richmond and Montmorency.
 Vincennes, Ind. H. M. SIMPSON & SONS.

Shot hole fungus, and sometimes lice or aphids.
 THE COE, CONVERSE & EDWARDS CO.

Fort Atkinson, Wis.

Root killing and fungus diseases.
 Sturgeon Bay, Wis. A. L. HATCH.

Only serious trouble was with worms in fruit caused by the May beetle. Entirely eradicated by breaking sod and giving clean cultivation.
 Des Moines, La. WATROUS NURSERY CO.

The greatest trouble we have experienced ourselves in growing cherries is getting the fruit picked. Labor seems to be getting scarcer every year. I think half the cherries this year will be lost on account of growers not being able to get pickers.

Des Moines, Ia. WRAGG NURSERY CO.

Wet seasons and poor drainage.
 Parsons, Kans. E. P. BERNARDIN.

Sometimes early frost destroys crop, especially in sweet varieties.

Salt Lake City, Utah. UTAH NURSERY CO.

Slugs on sweets largely.
 Roy, Utah. DAVIS CO. NURSERIES.

Gummosis is our great trouble.
 Portland, Ore. J. B. PILKINGTON.

We have some difficulty with the cut worms in the starting of our young trees. After the trees are transplanted, we have but little trouble with the cherry compared with the other fruits. They are subject to scale, and have aphids, and some bother with the slugs, but these are more easily overcome than some other pests on other trees.

Sunnyside, Wash. THE SUNNYSIDE NURSERY CO.

8. IN YOUR JUDGMENT, WHAT IS THE OUTLOOK FOR THE INDUSTRY?

CONCENSUS: THE CONSENSUS OF OPINION IS THAT WHERE THE CHERRY SUCCEEDS, THERE IS AN EXCELLENT OUTLOOK FOR THE INDUSTRY. THE CANNING FACTORY IS AN IMPORTANT FACTOR IN PLACING THE CULTURE OF THE SOUR CHERRY ON A STABLE BASIS.

Not very good.
 Yalesville, Conn. BARNES BROS. NURSERY CO.

There is a good opening for good cherries, but the expense of harvesting is the drawback—to get pickers at all being the trouble in most sections. The sour kinds grow readily and sell well, but above troubles must be reckoned with. I think the monilia can be controlled, but the birds not so easily with present sentiment.

Storrs, Conn. A. G. GULLEY.

Good.
 Cayuga, N. Y. H. S. WILEY.

We do not think the industry will increase in this locality.
 Dansville, N. Y. W. H. HARTMAN.

Excellent.
 Dansville, N. Y. MALONEY BROS. & WELLS CO.

Speaking from a nurseryman's standpoint, we would say that the outlook for the cherry industry is bright and profitable.

Dansville, N. Y. MOREY & SON.

Popular taste is for canned cherries and peaches, rather than for plums. Outlook good. We should say industry is not overdone.

Dansville, N. Y. GEO. A. SWEET.

Encouraging.
 Geneva, N. Y. U. P. HEDRICK.

Outlook is good. Cannerymen say that they can handle more fruit than is now in sight.

Geneva, N. Y. W. & T. SMITH CO.

In our judgment, the growing of cherries for market is bound to be overdone, when all of the extensive plantings which have been set out within the last five years come into bearing.

Rochester, N. Y. C. M. HOOKER & SONS.

Good.

Trumansburg, N. Y.

D. R. PEASE.

In my judgment, there will be a large demand for cherry trees made upon the nurserymen, but the increase will be small as compared with the demand. At this moment I have 21 pickers in the field. The last time I went to subordinate grange, a good brother warned people to beware of cherries—that if another orchard requiring the same number of pickers was established, there would be a dearth and fruit would remain on the tree to rot. Speaking of troubles, I may say that wet feet is the most common one—due to planting on soil that lacks drainage.

JOHN W. SPENCER,
Westfield, N. Y.

When trees are grown in soil suited to cherry culture, the outlook is very promising.

BROWN BROS. CO.,
LTD.,
Brown's Nurs'es, Ont.

There is always a good demand for cherries, and never sufficient on the market to meet the demand. The sweets retail at forty cents per pound, sour twenty to twenty-five cents per pound. Could not advise anyone to plant largely of cherries for commercial purposes. A small orchard of Richmond and the Morellos would do well.

P. J. BERCKMANS CO.
Augusta, Ga.

It seems to me that planting has been overdone, at least in sour varieties, and as soon as the fruit growers realize it, there will probably be less demand for the trees.

W. B. COLE,
Painesville, O.

On the increase.
Monroe, Mich.

I. E. ILGENFRITZ' SONS CO.

The prices are likely to drop very low if all of the trees now planted come into bearing, but the acreage is likely to be greatly cut down by the winter-killing of the trees, owing to the loss of the leaves from leaf-spot where they are not sprayed.

East Lansing, Mich.

L. R. TAFT.

Not much doing in this vicinity.
Bridgman, Mich.

C. E. WHITTEN.

Promises better in future. Demand for trees on increase, with advance in prices.

Vincennes, Ind.

W. C. REED.

Good.

South Haven, Mich.

FRANK A. WILKEN.

We believe the outlook is promising. The fruit is always in great demand, and it seems the market is never really satisfied.

Vincennes, Ind.

H. M. SIMPSON & SONS.

It is as bright as any fruit industry, if the people only gave proper care.

THE COE, CONVERSE & EDWARDS CO.

Fort Atkinson, Wis.

Good indeed.

Sturgeon Bay, Wis.

A. L. HATCH.

Doubt if commercially it will ever show more than a normal growth in this vicinity.

ARTHUR BRYANT
& SON,
Princeton, Ill.

So long as northern Iowa and southern Minnesota offer practically unlimited market, the industry is bound to grow and succeed.

WATROUS NURS. CO.
Des Moines, Ia.

I consider the outlook for cherries good. When you consider the great demand for cherries in the North, it seems to me we shall always have a good market.

WRAGG NURSERY CO.
Des Moines, Ia.

Good.

E. P. BERNARDIN,
Parsons, Kans.

Many cherries, especially sweets, are grown in this locality, and think outlook promising.

UTAH NURSERY CO.
Salt Lake City, Utah.

Good.

DAVIS CO. NURSERIES
Roy, Utah.

Good; will increase speedily in our section, especially if some remedy or control is found for gummosis, which has ruined some fine young orchards.

Portland, Ore.

J. B. PILKINGTON.

The outlook for cherry planting is good, as people are learning how to market this stock successfully in eastern markets, where there is a demand for high grade fruit.

Sunnyside, Wash.

THE SUNNYSIDE NURSERY CO.

GENERAL OBSERVATIONS.

I do not understand the failure of sweet cherries to grow. There are near here on one farm at least fifty trees, and all forty or more years old. These old trees may be found all over the state bearing well. But sweet trees planted now fail under almost all conditions to grow at all. Of twenty varieties that I planted here in 1896, only Windsor and Down-



WHITE OXHEART

SWEET VARIETIES

GOV. WOOD

ers Late Red ever grew to produce fruit, and neither of these enough thus far to pay first cost of trees. Sour varieties planted at the same time mostly did well. But one must be where cheap help can be had to pick, and then there is one continual fight with birds. Within the past week over half the crop of Early Richmond has been taken by birds.

Storrs, Conn.

A. G. GULLEY.

For a number of years, cherry trees have been planted literally by the millions in the northwestern counties of the state which border on Lake Michigan, beginning just north of Muskegon and extending as far north as the Straits of Mackinaw. While there have been extensive plantings in some of the other counties, there are very few sections where the cherry crop is sufficient to supply the local demand. The extensive planting held up well to 1911, but there was a large drop in 1912, and it would appear that the limit has been about reached. With this explanation, I think that the answers I have given upon the blank will not be misleading.

East Lansing, Mich.

L. R. TAFT.

There are very few sweet cherries grown here, and ninety per cent of the sour cherries are Montmorency. It has more commercial value than all others put together.

South Haven, Mich.

FRANK A. WILKEN.

Sweet cherries are positive failures in this prairie region, and so far our northern Iowa merchants have found a market for all the Early Richmond and Montmorency we produce. Therefore, we have no canning factories. Although our cherry crop was lighter than usual this year, on account of the heavy yield of last summer followed by an excessive drouth, the size and quality of the fruit was unusually good, and practically all our crop was sold at \$2.30 per bushel, from which a total expense of about \$1.00 should be deducted to figure the net profit.

Des Moines, Ia.

WATROUS NURSERY CO.

APPLE PACKING

It is said that the bill now before Congress aiming to establish a system of packing which will permit the use of the brand "U. S. Standard" stands a good chance of becoming a law. It is also said that the bill has the approval of men throughout the country in all branches of the apple industry, although one of the chief promoters of the bill, Congressman Sulzer of New York City, does not represent an agricultural population.

This bill, should it become a law, will not compel the use of the form of package or the adoption of the grades specified—it only stipulates that packages of apples shall not be marked "U. S. Standard" unless they conform to the provisions of the bill. In the first place, three standard grades of apples are established, as follows: U. S. Standard, minimum size $2\frac{1}{2}$ inches; U. S. Standard, minimum size $2\frac{1}{4}$ inches; U. S. Standard, minimum size 2 inches, in each case the minimum size specified being in transverse diameter. Apples so packed are to be of one variety, hand picked, well grown, of good color for that variety, normal shape, and practically free from bruises and other defects, or within ten per cent of these specifications. The standard barrel shall have dimensions as follows: length of stave, $28\frac{1}{2}$ inches; diameter of head, $17\frac{1}{8}$ inches; distance between heads, 26 inches; circumference of bulge, 64 inches, outside measurement; thus giving as nearly as possible 7056 cubic

inches. Barrels of other sizes used for apples shall not be considered as standard unless plainly marked on end and size, showing their fractional capacity in relation to the standard. The act will be effective July 1, 1913.

REPORT OF COMMITTEE ON GRADING NURSERY STOCK

At the last annual meeting of the American Association of Nurserymen held at St. Louis, Mo., in June, 1911, a motion was passed appointing a committee to agree upon a uniform set of grades for fruit trees, to be adopted by the Association. The motion went further and required the committee to have the same printed in the trade journals at least one month prior to the next annual meeting, and in compliance with that notion, your committee presents the following grades.

All grades of trees shall be of fair shape, branched, well rooted. Caliper to govern and measurements taken two inches from the crown or bud, of the following grades:

Apple: 11-16 in. and up, 5 ft. and up; $\frac{5}{8}$ to 11-16 in., 4 ft. and up; $\frac{1}{2}$ to $\frac{5}{8}$ in., $3\frac{1}{2}$ ft. and up; $\frac{3}{8}$ to $\frac{1}{2}$ in., 3 to 4 ft., whips included.

Cherry: $\frac{3}{4}$ in. and up, $4\frac{1}{2}$ ft. and up; $\frac{5}{8}$ to $\frac{3}{4}$ in., 4 ft. and up; $\frac{1}{2}$ to $\frac{5}{8}$ in., 3 ft. and up; $\frac{3}{8}$ to $\frac{1}{2}$ in., $2\frac{1}{2}$ ft. and up.

Standard Pear: $\frac{3}{4}$ in. and up, 5 ft. and up; $\frac{5}{8}$ to $\frac{3}{4}$ in., 4 ft. and up; $\frac{1}{2}$ to $\frac{5}{8}$ in., $3\frac{1}{2}$ ft. and up; $\frac{3}{8}$ to $\frac{1}{2}$ in., 3 ft. and up.

Dwarf Pear: $\frac{3}{4}$ in. and up, 3 ft. and up; $\frac{5}{8}$ to $\frac{3}{4}$ in., 3 ft. and up; $\frac{1}{2}$ to $\frac{5}{8}$ in., $2\frac{1}{2}$ ft. and up; $\frac{3}{8}$ to $\frac{1}{2}$ in., 2 ft. and up.

Two year Plum: $\frac{3}{4}$ in. and up, 5 ft. and up; $\frac{5}{8}$ to $\frac{3}{4}$ in., 4 ft. and up; $\frac{1}{2}$ to $\frac{5}{8}$ in., $3\frac{1}{2}$ ft. and up; $\frac{3}{8}$ to $\frac{1}{2}$ in., 3 ft. and up.

One year Peach, Plum and Apricot: 11-16 in. and up, 5 ft. and up; 9-16 to 11-16 in., 4 ft. and up; 7-16 to 9-16 in., 3 ft. and up; 5-16 to 7-16 in., 2 ft. and up.

Some exceptions to the above may be made on such varieties as are known to the trade to be light growers, such as Yellow Transparent, Duchess apple, Seekel pear, English Morello cherry, etc., or from weather conditions affecting their growth, but such exceptions *shall* be noted in the printed price list issued by each grower or in their correspondence regarding all sales.

We would further say that the grades as named were adopted by the Western Association of Nurserymen at their meeting held in Kansas City in December, 1911.

It has been the aim of the committee to adhere to the grades generally used by the majority of the nurserymen of the Association, and as most of these grades have been a standard for years, there should be no trouble in agreeing upon its adoption. The main object was to cut the number of grades to the minimum and to make enough distinction between each grade.

Respectfully submitted,

E. P. BERNARDIN,

E. S. WELCH,

W. T. MALONEY,

Committee.

REPORTS FROM PROMINENT EUROPEAN NURSERYMEN

Influence of Winter of 1912 on Nursery Stock. Characteristics of Trade. Increasing Demand for Ornamentals. Leading Varieties.

CONDITIONS IN ANGERS

WHAT WAS THE CHARACTER OF THE WINTER AND WHAT WERE ITS EFFECTS ON STOCK IN NURSERY ROW?

Autumn and winter exceptionally rainy. Vegetables remained tender and kept their leaves much longer than during normal years. For that reason, preparations for storing them were very difficult.

HAD YOU ANY DIFFICULTY WITH CELLARED STOCK?

Here we scarcely store in cellars at all. Most often the plants are put in boxes as soon as they come from the nurseries. This year especially, when we did not have frosts, the plants were not put in cellars at all.

HAS THE SEASON BEEN CHARACTERIZED BY A STRONG DEMAND FOR SPECIAL LINES AND VARIETIES? KINDLY INDICATE THESE.

Sales of fruit and forest trees are increasing regularly, as well for the Continent as for America, and ornamental plants have always been lacking in the spring for the past ten years.

IS THE DEMAND FOR FRUIT TREES HOLDING UP, AND DO YOU THINK IT WILL CONTINUE?

Fruit trees sold exceptionally well this season. French land owners have been planting largely for several years, and there is cause to believe that this will continue during five or six years, if not more.

DOES THE EXPERIENCE OF THE PAST TWO OR THREE YEARS INDICATE AN INCREASED AND CONTINUING INTEREST IN ORNAMENTALS AND LANDSCAPE GARDENING? WHAT IS THE OUTLOOK?

Ornamental plantings in France are increasing steadily. Nevertheless, the strides made in this line are less remarkable than in forest plantations, which are regaining rapidly.

SHOULD THERE NOT BE A GENERAL ADVANCE IN THE PRICE OF NURSERY STOCK?

Yes, all articles of nursery stock should increase in price. Besides, this will be the enforced consequence of the increase in price of labor and of all materials necessary to horticultural industry. Stationary prices would cause the ruin of our business.

CHARLES DÉTRICHÉ AINÉ,

123, Route des Ponts-de-Cé,
Angers (Maine & Loire), France.

A NOTE FROM HOLLAND

WHAT WAS THE CHARACTER OF THE WINTER, AND WHAT WERE ITS EFFECTS ON STOCK IN NURSERY ROW?

The winter was very severe, and the cold and frost in the spring did no good to the seedlings.

GENERAL OBSERVATIONS.

The stand of apple and pear stocks is not so heavy as last season. Plums and cherry stocks will be very scarce. The demand for fruit stocks, especially for plums and cherries, is already great.

DOORNBOSCH & SON,
Veendam, Holland.

FROM A FOREST NURSERY IN GERMANY

WHAT WAS THE CHARACTER OF THE WINTER, AND AND WHAT WERE ITS EFFECTS ON STOCK IN NURSERY ROW?

Exceptionally hard winter (30 degrees below zero); in spite of this the nursery rows were not damaged to any considerable extent, with the exception of *Buxus* and *Cupressus* varieties. All our *Abies*, *Picea*, *Pinus* varieties could stand the cold very well.

HAD YOU ANY DIFFICULTY WITH CELLARED STOCK?

Our cellars are only used for assorting and packing.

HAS THE SEASON BEEN CHARACTERIZED BY A STRONG DEMAND FOR SPECIAL LINES AND VARIETIES? KINDLY INDICATE THESE.

Demand was very strong, especially lively call for evergreen seedlings and transplants, caused by the dry summer of 1911, forest fires, etc., in Europe as well as in the United States.

IS THE DEMAND FOR FRUIT TREES HOLDING UP, AND DO YOU THINK IT WILL CONTINUE?

Increasing demand for fruit tree stocks indicates a good prospect in the fruit tree business.

DOES THE EXPERIENCE OF THE PAST TWO OR THREE YEARS INDICATE AN INCREASED AND CONTINUING INTEREST IN ORNAMENTALS AND LANDSCAPE GARDENING? WHAT IS THE OUTLOOK?

A growing interest of estate owners and whole communities for beautifying their home grounds and laying out public parks, respectively, resulted in a larger demand for ornamentals, shade and park trees also.

SHOULD THERE NOT BE A GENERAL ADVANCE IN THE PRICE OF NURSERY STOCK?

Increased demand all around will be followed by an advance in prices, as a matter of course.

WHAT ARE YOUR VIEWS ON THE REPLACEMENT QUESTION?

Strictly against replacement, for no responsibility can rest with the nurseryman after the stock left his place.

J. HEINS' SONS,
Halstenbek (Holstein), Germany.

AN ENGLISH WHOLESALER

WHAT WAS THE CHARACTER OF THE WINTER, AND WHAT WERE ITS EFFECTS ON STOCK IN NURSERY ROW?

A very good autumn and winter for transplanting and handling stock, but a dry spring from the beginning of April for seven weeks, with many spring frosts, which has thinned some late plantings.

HAD YOU ANY DIFFICULTY WITH CELLARED STOCK?

Cellars are not used here. We had a stop of one week through frost—this has been about the average the past ten years.

HAS THE SEASON BEEN CHARACTERIZED BY A STRONG DEMAND FOR SPECIAL LINES AND VARIETIES? KINDLY INDICATE THESE.

I found a good demand last season for most classes of nursery stock.

IS THE DEMAND FOR FRUIT TREES HOLDING UP, AND DO YOU THINK IT WILL CONTINUE?

The demand for fruit trees has been better than I remember for any previous season, particularly apples and plums on Mussell stock.

SHOULD THERE NOT BE A GENERAL ADVANCE IN THE PRICE OF NURSERY STOCK?

Owing to the increase in working expenses I think there should be an advance in prices; but owing to the heavy stocks of many articles, I doubt if prices will be raised much just now.

WHAT ARE YOUR VIEWS ON THE REPLACEMENT QUESTION?

Unless an agreement is entered into to add 25 to 30 per cent to the invoices, a nurseryman should not be held liable to replace plants failing to grow. These conditions are generally observed here.

GENERAL OBSERVATIONS.

A large breadth of stock under cultivation. The outlook now is generally favorable for a good growth.

WALTER C. SLOCOCK,
Goldsworth Nurseries,
Woking, Surrey, England.

BUSINESS IN BOSKOOP

WHAT WAS THE CHARACTER OF THE WINTER, AND WHAT WERE ITS EFFECTS ON STOCK IN NURSERY ROW?

Short but severe, freezing plants which we never knew to freeze here before. However, it did not delay shipping.

HAD YOU ANY DIFFICULTY WITH CELLARED STOCK?

No cellars used here as in United States.

HAS THE SEASON BEEN CHARACTERIZED BY A STRONG DEMAND FOR SPECIAL LINES AND VARIETIES? KINDLY INDICATE THESE.

Conifers, roses, rhododendrons, and hardy azaleas—especially ever blooming roses on dogwood briar, also gladiolus bulbs.

IS THE DEMAND FOR FRUIT TREES HOLDING UP, AND DO YOU THINK IT WILL CONTINUE?

Do not carry them.

DOES THE EXPERIENCE OF THE PAST TWO OR THREE YEARS INDICATE AN INCREASED AND CONTINUING INTEREST IN ORNAMENTALS AND LANDSCAPE GARDENING? WHAT IS THE OUTLOOK?

Yes, a strong increase in ornamentals, rhododendrons, conifers and hardy azaleas. Outlook: demand has just started; we are looking for a much stronger demand.

SHOULD THERE NOT BE A GENERAL ADVANCE IN THE PRICE OF NURSERY STOCK?

Some articles sold below cost of production, a general increase should be welcomed, in our opinion, by all growers.

WHAT ARE YOUR VIEWS ON THE REPLACEMENT QUESTION?

Doing wholesale business only, and we have no replacement. Our opinion is: a nurseryman in selling should not promise to make any replacement; and the nurseryman, tree agent, etc., and not the buying public, is to blame for this unsound condition.

GENERAL OBSERVATIONS.

Financial conditions good. Buying good, although more conservative than other years.

KALLEN & LÜNNEMANN,
Boskoop, Holland.

IN ADVERTISING

Says an exchange:

"If you toot your little tooter and then lay away your horn,
There's not a soul in ten short days will know that you were born.
The man who gathers pumpkins is the man who plows all day,
And the man who keeps a-humping is the man who makes it pay.
The man who advertises with short and sudden jerks
Is the man who blames the editor because it never works,
The man who gets the business has a strong and steady pull,
He keeps his trade and paper from year to year quite full.
He plans his advertisement in a thoughtful, honest way,
And, keeps forever at it until he makes it pay."

Enthuse, promulgate, push, and any business prospers.—Hubbard.

THE ORCHARD

"Red and russet, and yellow,
Lying here in a heap,—
Pippins, rounded and mellow;
Greenings, for winter keep;
Seek-no-further, whose blushing
The soul of a saint would try,
Till his face showed the crimson, flushing
The cheek of a Northern Spy."

—Farm Journal.

NURSERY STOCK FOR NEW ENGLAND PLANTING

Prof. F. C. SEARS, Massachusetts Agricultural College

(Delivered before American Association of Nurserymen, Boston)

To anyone who has studied the agricultural development for the last few years there is I think no more interesting phase of it than the tremendous interest which has been shown in the orchard business all through the country. We find men from all walks of life buying farms and setting orchards. It is alarming really to anyone who is seriously interested in the orchard industry to find people so ignorant of the fruit growing business as many of these are going haphazard into the industry. So far as I know, Mr. J. H. Hale is the only man up to date who has had the courage to come out and say he thought these people were making a mistake. There isn't any question in my mind that a great many people who are going into it ought not to.

I want to plead guilty as one of the men who have gone into orcharding. Professor Waugh and myself five years ago became so enthusiastic over the orchard business that we thought we couldn't stand it any longer, so we began to plant an orchard. We have some one hundred twenty acres set out at the present time, and have found it a very interesting venture. Naturally we have had various experiences with nursery stock.

VARIETY QUESTION ALL IMPORTANT

I believe the variety question is the all important question with the man who is setting an orchard. People who have been pushing the orchard industry here in Massachusetts have tried to make one point very emphatic, to insist on our setting only those varieties which are high in quality. We are certain that our section is one of the few that grow the highest quality apples, and we think our consumers are coming to have somewhat the same view. But we find the more discriminating customers here have come around to the point where they would rather have an eastern apple than a western apple, and while we take off our hats to the western men for all they have done for the industry, we cannot help thinking we have a tremendous advantage in the quality of the fruit that can be grown here.

VARIETIES FOR NEW ENGLAND

I think our plantings ought to be restricted to those varieties which have been proved by test to be successful here. Williams Early, McIntosh, Rhode Island Greening, Baldwin, and Palmer Greening,—it seems to me those ought to be our leaders. I think most emphatically we ought to let the western apples alone.

Another list of varieties I am sure we ought not to plant here is that list made up of the more recent popular western sorts, like Delicious, King David, and Stayman Winesap. They are good apples and all right in their place, but we don't know as yet that Massachusetts is a good place to plant them. Then there are Grimes Golden, Spitzenberg, Jonathan, and so forth, which can be grown here in certain seasons, but are not, one year with another, as satisfactory as elsewhere.

NURSERY STOCK

There comes up the question of where to buy nursery stock, whether in the local nursery or of distant nurserymen. It is a very general impression that it is very desirable to plant trees which have been grown in the immediate vicinity of the orchard. I don't know any theoretical point connected with orcharding which seems to me more reasonable. The theory is perfectly sound, but practically I don't believe there is anything in it. I had some experience in Nova Scotia which confirmed my notions on this subject. In a series of demonstration orchards, it was found that a larger per cent of the trees grown nearby were lost than of those from any other section.

On the other hand, it seems to me there are very definite reasons for preferring local nurserymen. First, the stock is likely to arrive in fresher condition; second, there is less expense; and third, the local nurseryman is apt to feel his responsibility a little more than the man at a distance.

THE QUESTION OF PEDIGREED STOCK. It seems to me up to the present the evidence is overwhelmingly in favor of the fact that there is a marked individuality in fruit trees. Some records from the Central Experimental Farm, Ottawa, Can., which I have looked over show a difference of hundreds of bushels in the yield of different trees of the same variety over a period of ten or fifteen years.

The only question which remains to be settled is the question whether this individuality can be transferred to the next generation.

DWARF TREES AS FILLERS IN THE ORCHARD. In our orchard we have followed altogether the plan of using fillers among the permanent trees, which are forty feet apart and interplanted both ways. The dwarf tree will lend itself splendidly to that type of plantation. In plantations at the College we have grown Doucin alongside the standard, and from indications the dwarfs are considerably ahead of the standards as to bearing. We have trees starting their fifth year which bore a good scattering of apples last year, while the standards haven't begun to bear at all.

AGE OF TREES TO BUY. In our work we have bought almost altogether trees one year old. I understand the notion favoring the one year trees has been growing very remarkably the last two or three years. There are certain very definite advantages in the one year tree: (1) The cost is decidedly less. (2) The trees are easier to handle. (3) They transplant better. (4) It has seemed to me that a tree to be marketable at one year must have been thrifty. (5) A one year tree allows you to make the head at the point you want it. You can't buy low headed two year trees.

SIZES AND GRADES. It is the uniform custom among nurserymen to raise the price as size increases. Personally, I don't believe that the over large tree is desirable. I believe the tree around five feet is the ideal tree.

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Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

NURSERYMEN'S INTEREST IN CONSERVATION

This editorial is suggested by the action of the Association at its last meeting in voting to appoint a delegate to represent it at the forthcoming Congress on conservation. We merely present it for the purpose of drawing attention to the many sided character of this great question. The conservation doctrine is essentially altruistic. It means in simple language the saving of the nation's resources not only for the use of the present generation, but for those who are to follow. It differs materially from the policy so often followed by the grasping individual of the present period which is, in effect, the helping of yourself as completely as possible without thought of the person who succeeds you. This says, in effect, "Get all you can yourself, and get it quickly; and let the devil take the hindmost."

The nation's assets belonging to all the people for all time are, of course, mainly the great natural resources of the country,—the soil, the minerals, including oil and gas, the latter often shamefully wasted, forest products, water and its products; and it is interesting to ponder over the statement made by students who study the products of water, that more food can be produced on an acre of water than can be grown from an equal area of land. Besides the soil, the materials which it contains, and the forms which it may produce, we have the large and frequently overlooked question of natural beauty. Little thought is given to this feature as a national asset, but where would Switzerland be without her mountains, her lakes, and her waterfalls? Scenic beauty is rapidly coming to have a definite market value. This generation has no right to despoil or take away from future generations features of esthetic interest. These are entailed, or should be entailed, to all the generations to come. Rather should the present generation be concerned with the effort to conserve and create beauty. The statement that beauty is becoming more and more a salable product is readily proved by the prices we see our millionaires giving for sites having commanding views and attractive vistas.

The nurseryman is a manufacturer of forms of beauty in ornamental plants and beautiful shade trees. In propagating these, he becomes a direct manufacturer of the esthetic. As these plants are produced and sold, the nurseryman becomes an educator, and a promoter in the field of esthetics. This aspect of conservation is frequently overlooked in the consideration of the apparently larger and more material sides of the question, but as time goes on, it will unquestionably take a more prominent place in the consideration of the subject. For these latter reasons, it is particularly appropriate that the nurserymen should be represented at the Conservation Congress, and we are glad to see a move in this direction.

For the past fifteen years, the editor of **COVER CROPS** this journal has been an ardent advocate of the benefits and the beneficent features of the cover cropping system. Some ten years ago he wrote a bulletin on the subject, published by the Cornell Experiment Station. In this bulletin, he called attention to the valuable qualities of hairy vetch as a soil regenerator. Look-

ing back over these years, it is interesting to note how long it takes for ideas of this kind to get a hold in public practice. *The Rural New Yorker* is just now contributing considerable of its space to a discussion of this important question, and we find among the cover crops recommended for Jersey, Maryland, and Delaware, rye, hairy vetch, cowhorn turnips, and crimson clover, the latter being restricted, however, to the milder portions of that region, and not considered even hardy enough for northern New Jersey.

In the bulletin referred to (Cornell 198), the remarkable nitrogen-acquiring power of vetch was brought out by chemical analyses of top and root. Seed sown about the first of August developed plants by the first of November which had a fertilizing value measured by nitrogen alone of some \$20 per acre. This exceeded alfalfa, which stood next, by a considerable amount, and alfalfa surpassed mammoth clover and crimson clover in about the same ratio.

We believe that nurserymen should use cover crops much more freely than many of them are now in the habit of doing, and thereby save very considerably in their fertilizer bills. In most portions of New York, New England, and of course farther south, a cover crop put in by the first of August on well prepared land will in its return of fertilizer material the same season much more than pay for the cost of preparing the soil and securing the seed. We believe that by the judicious use of cover crops the nurseryman would not need to be so constantly in quest of tracts of virgin land for the growing of his plants. Old soils can be regenerated and brought into thoroughly satisfactory productive conditions by the judicious use of this cover cropping system. We shall be glad to record any experiences of nurserymen in this direction.

Legislation

UNITED STATES POST OFFICE RULING IN REFERENCE TO GREENHOUSE PLANTS AND NURSERY STOCK

As showing the incongruities and contradictions which exist between federal and state legislation in reference to the movement of nursery stock through the United States mails, we have the ruling of the United States Post Office Department of May 29, 1912, which says that nursery stocks, including florists' stocks, may be admitted to the mails only when accompanied by a certificate from a state or government inspector to the effect that the nursery from which said stock is shipped has within a year been inspected and found free from injurious insects. This regulation refers to nursery or florists' stocks grown in greenhouse as well as that grown in the field.

In contradiction of this, we find that the state laws of Pennsylvania exempt greenhouse or florists' stock from necessity of inspection certificates, and that the state of New York does the same thing. The section in the New York laws applying to this says the provisions of this and the preceding section shall not apply to florists' greenhouse plants, flowers, or cuttings, commonly known as greenhouse stock, and no certificate shall be required for stock so

shipped into the state; that its sale and shipment become either interstate commerce traffic or commerce with foreign nations. We have here two distinct rulings, and it would be a nice question to know which would govern in the case of greenhouse stock shipped to points within the state. Inasmuch as all the post offices are under federal authority, it may be supposed that the United States ruling would prevail.

J. H. HALE PEACH

The editorial office has received a sample of the new J. H. Hale peach. This new variety is being introduced by the William Stark Nursery of Chester, Missouri. Mr. Hale claims that his peach is a perfect freestone of first quality; that it is round in form, making it easy to pack, handsome in appearance; that it colors exceptionally early; that it is larger than Elberta, hardier in fruit bud than that variety; and that its crowning characteristic is its firmness of flesh.

The specimen reached us in excellent condition, and the following description was made:

Peach: J. H. Hale: Size large, $3\frac{1}{2} \times 3\frac{1}{2}$ in.; form globular, slightly obconical, regular, suture clearly defined, but not deeply depressed; skin yellow, almost entirely covered with a rich mottling of red and purplish crimson; flesh deep yellow, exceedingly firm, juicy, deeply stained with red near pit; pit in specimen examined large, split, deeply corrugated, practically free; flavor brisk sub-acid; quality fair to good.

The strong points about this peach are its remarkably handsome appearance and its exceptionally firm texture of flesh. It would, therefore, seem to give promise of being particularly useful as a high class variety having exceptional shipping qualities. In general appearance, it reminds one of Reeve's Favorite, but is not as sweet and high flavored as that variety, but very much firmer in texture.

It would seem, speaking very conservatively, that most of the claims of Mr. Hale are substantiated in the qualities and characteristics of the specimen before us. The firmness of flesh is indeed a prominent feature. It is unsafe to judge of the quality of a variety from a single specimen, especially one that has been forwarded through the mails. It is safe to say, however, that this specimen seemed to be an improvement on Elberta. The specimen received was grown in Fort Valley, Ga., and when tasted on July 16 was in good eating condition. If this newcomer possesses equally valuable characteristics of tree, it ought to be a very important acquisition to our list of commercial peaches.

NOTE AND COMMENT

Among the American nurserymen who attended the International Horticultural meeting in London was Mr. E. N. Reasoner of Reasoner Brothers, Oneca, Florida. The visits of American nurserymen and florists to such establishments as Vilmorin, Andrieux & Company, Victor Lemoine & Fils, and other noted French and Belgian horticulturists, were greatly enjoyed.

Messrs. C. W. Denton, B. E. Denton and G. W. Williams of Dansville, N. Y., have formed a partnership and will conduct a general nursery business. They have succeeded to the business of C. W. Denton & Son, and will use the style of Denton, Williams & Denton.

AMERICAN PEONY SOCIETY

The Meeting of the American Peony Society which took place at Ithaca, N. Y., on June 19 and 20, was very Successful from Every Point of View. There was a Better Attendance than usual, and a good deal of Important Business was Transacted

Among those present were: Messrs. B. H. Farr, Reading, Pa.; R. T. Brown, Queens, Long Island, representing the Cottage Gardens Co.; S. G. Harris, Tarrytown, N. Y.; Geo. H. Peterson, Fair Lawn, N. J.; E. B. George, Painesville, Ohio, representing the Storrs and Harrison Co.; C. J. Maloy, Rochester, N. Y., representing Ellwanger & Barry; Edwin A. Reeves, Cleveland; O. H. Dickinson, Springfield, Mass.; Geo. F. Carter, Syracuse, N. Y.; Prof. A. P. Saunders, Clinton, N. Y.; J. J. Styer, Concordville, Pa.; Wm. J. Engle, Dayton, O.; Dr. A. J. Knapp, Evansville, Ind.; John Connon, Hamilton, Canada; James Cowan, Oshawa, Canada; Albert Lahodnev, Hempstead, Long Island.

The exhibition was held in one of the large rooms of the Agricultural Department of Cornell University; it was made up largely of a representative collection of cut blooms from the Society's plot on the grounds of the Department. There were besides a few exhibits from amateurs.

The judges' awards were as follows:

Class 2. Amateurs. For the best collection of not less than 25 varieties, one bloom of each, First, A. P. Saunders, Clinton, N. Y.; Second, Mrs. F. S. Kellogg, New York Mills, N. Y.

Both of these collections were well staged and showed good cultivation, Professor Saunders' collection embracing a wide range of color, especially in the yellow and light pink varieties.

Class 3. For the best new seedling of American origin not previously exhibited.

A. P. Saunders, Clinton, N. Y., for the variety Jean Bancroft, a beautiful blush with cream center and showing immense blush guards.

In addition to the above, T. A. Havemeyer, Esq., of Glenhead staged a collection showing high cultural skill, but owing to the difference in the season between Mr. Havemeyer's locality and that of Ithaca, many varieties were too far advanced to do the collection justice.

The exhibition was open to the public and drew on both days a large number of visitors, many of whom expressed surprise at the variety in form and color to be found in the

modern peony. Almost everyone who came in to the exhibition also paid a visit to the plot, which is located about a mile away on farm land in the country. The weather on both days, cool yet sunny, left nothing to be desired. The dates of the meeting, which it was hoped would cover the time of full midseason, fell a little earlier than that, on account of the cool weather which has prevailed for some weeks past in the northern part of the state. Nevertheless, there was an excellent showing of all the early and early mid-season varieties. The members of the Society made an excursion to the plot on Thursday morning, and there spent a couple of hours very profitably in studying old and new

varieties, comparing notes, and discussing problems of identification and culture.

The business sessions of the Society were held on Wednesday afternoon and evening. Outside of the routine business, the principal matter in hand was the question of the disposal of the surplus plants in the plot. There is to be a permanent planting at Cornell of a representative collection of three plants of each variety described in the bulletins of the nomenclature committee.

This planting is already partly completed, and will be brought to a close by the end of the present season. As the work of identification and description to be done on the Cornell collection is now completed, it is not necessary to retain the whole plot any longer. The main part is to be sold as a whole, and the question of its disposal was discussed at length in the sessions of the Society. As to the smaller collections, the original donors having consented to the plan, these are to be listed and offered for sale separately. This will afford an excellent opportunity to anyone who wishes to add to his stock, to obtain a representative set of varieties in strong clumps four to seven years old.

The funds obtained by the Society from these sales will be devoted to the publication of an illustrated Peony Manual containing accurate descriptions of all the standard varieties, cultural directions, and much other material indispensable to the peony grower. A special committee on publication



A PORTION OF THE EXHIBIT AT THE ANNUAL MEETING OF THE AMERICAN PEONY SOCIETY, CORNELL UNIVERSITY, JUNE 1912

was appointed, consisting of Messrs. Farr, Harris, Saunders, Brown, and Craig; it is hoped that it will be possible to get the work ready for the press within a year.

The officers of the Society for the coming year are: President, B. H. Farr; Vice-president, E. B. George; Treasurer, J. H. Humphreys; Secretary, A. P. Saunders; Director to serve three years, S. G. Harris.

Mr. C. S. Harrison, of York, Nebraska, the Dean of peony growers and peony enthusiasts in America was unanimously elected to honorary membership. In recognition of his services in connection with the preparation of the bulletins, Mr. Leon D. Batchelor was also elected to honorary membership. Fourteen new active members were elected, almost all of them amateur growers.

Prof. John Craig, of Cornell, who was unable to be present at the meetings on account of ill health, sent the following telegram to President Farr: "Present my greetings to members Peony Society with deep regret at inability to attend, but hearty wishes for successful meeting. This peony investigation represents the best piece of continuous coöperative effort accomplished by the department with any society or organization. I consider the three thousand or more dollars it has cost money well spent." In reply, Mr. Farr sent the following message: "The Society acknowledges your kind message, sends thanks to you for your effective coöperation in the work at Cornell, and hopes for your speedy and complete recovery. By unanimous vote, all join me in taking advantage of this opportunity to express the high regard in which you are held by the members of the Society."

In the absence of Professor Craig, the Department of Horticulture was represented at the meetings by Prof. A. C. Beal, to whom much credit is due for his efficient services in connection with the exhibition.

With the completion of the work of the Nomenclature Committee, the next work before the Society is the publication of the Peony Manual, and it is hoped that all members of the Society and other peony growers who have been using the descriptive bulletins will give the publication committee the benefit of their notes and observations, so that the descriptions may be as accurate as possible before being published in permanent form.

It is the purpose of the Society now to make an effort to enlarge its membership, particularly among amateur growers. Those amateurs who have attended the meetings and exhibitions in the past have always been enthusiastic over the benefits to be derived from them, and it is believed by the members of the society that there are amateur growers in all parts of the country who would be glad to come in if they could be made to realize the importance to themselves of their doing so.

No definite action was taken on the meeting place for next year. Cleveland and Chicago were both discussed as possible meeting places, but the matter was finally left in the hands of a special committee.

It was the general opinion of the members that the Ithaca meeting was the best yet; there was good-fellowship in the air, and even politics could not disturb the general cordial feeling.

Excellent exhibits were made by the Cottage Gardens Nurseries, B. H. Farr, E. A. Reeves, G. H. Peterson, A. P. Saunders and others. Mr. Rosenfield of Omaha, Nebr. staged a fine new variety under the name of Karl Rosenfield.

A. P. SAUNDERS,
Secretary.

Doings of Societies

NATIONAL ASSOCIATION OF GARDENERS

This organization met in Horticultural Hall, Boston, Massachusetts, on Saturday afternoon, July 13. A joint session of this Society was held with the National Sweet Pea Society, whose meeting is scheduled at the same place and time.

AMERICAN SEED TRADE ASSOCIATION

The following officers were elected at the last meeting of this Association: President, Chas. N. Page, Des Moines, Ia.; first vice-president, Harry L. Holmes, Harrisburg, Pa.; second vice-president, Arthur B. Clark, Milford, Conn.; secretary-treasurer, C. E. Kendel, Cleveland, O.; assistant secretary, J. H. Ford, Ravenna, O. Membership committee, Albert McCullough, Arthur B. Clark, and J. C. Robinson. Executive committee, Leonard Vaughan, Kirby White, Chas. D. Boyles, C. N. Keeney, and W. D. Ross.

The American Rose Society will meet with the Society of American Florists and Ornamental Horticulturists at the annual convention of that organization in Chicago during the month of August. Benjamin Hammond is Secretary. Adolph Farenwald is President. Mr. Farenwald has recently returned from a visit to the International Horticultural Society exhibition and conference in London.

PORT ARTHUR, TEX.—At the recent convention of the Gulf Coast Nurserymen's Association, the officers were re-elected, as follows: W. A. Stockwell, president; R. W. Halbert, vice-president; I. M. Johnson, secretary; H. T. Lilly, treasurer. Steps were taken looking to the federation of the Association with the horticulturists of southern Texas and Louisiana, under the name of the Gulf Coast Horticultural Society.—*The Florists' Exchange*.

Exhibitions

AN APPLE SHOW

In connection with the eighteenth convention of the International Apple Shippers' Association will be held this Association's third annual apple show. August 7 to 9 are the dates set for the exhibition and meeting. Anyone who desires may enter an exhibit, large or small, provided it is truly representative of the section from which it comes, and that it be exhibited as the product of the state where it was raised. It is the purpose of the exhibit to show the condition of commercial varieties of apples at this season. Further information may be had from Mr. C. A. Kerr, 79 West South Water Street, Chicago, who has charge of arranging for the exhibit.

MEETING OF THE PACIFIC COAST NURSERYMEN'S ASSOCIATION

[Account of meeting delayed because of pressure of National Society's meeting on our columns.]

The Pacific Coast Association of Nurserymen held their tenth annual meeting at Hotel Utah, Salt Lake City, June 4, 5, and 6. The time of the convention was dated to favor the convenience of those who desired to go on to the meeting of the National Association at Boston.

W. W. Armstrong, president of the Salt Lake City Commercial Club, said in part in his address of welcome:

"Salt Lake City and Utah are historic in the West. Utah is the mother of irrigation. Utah is not only a pioneer in irrigation, but has been the pioneer in the development of the interior basins.

"Salt Lake has nearly one hundred thousand people. Utah has five hundred million tons of iron ore; her mines have produced five hundred twenty-five million dollars; has immense undeveloped oil fields and all known minerals. Near Salt Lake we have the greatest smelter in America. Of Irrigable lands Utah has doubled those watered by the Nile. The mortality rates of Salt Lake are only one-half of the usual. The Commercial Club building was erected at a cost of four hundred thousand dollars, and the members of the Nurserymen's Association are cordially invited to make use of it during their stay in Salt Lake."

Mr. McDonald of Toppenish stated that in 1911 fifteen million apple grafts were planted in the Yakima Valley with the result that they grew more trees than could be sold. Quite a number would be carried over into two year old form. Mr. McDonald estimated the planting of apple grafts in the same district for 1912 about three million grafts or one-fifth of the previous year.

Mr. C. P. Hartley of Emmett, reporting for Idaho, stated that the nurserymen of southern Idaho had been able to close out nearly all their merchantable stock and were increasing their planting somewhat for the season of 1912.

C. F. Lansing of Salem, Oregon, reported but a small amount of stock carried over, and an active demand for Italian prune trees; and that they had already booked as many orders for prunes as they cared to accept until July when they would make a count.

Reports from other parties indicated the scarcity of Italian prune trees, an insufficient supply to meet the prospective demand. Apple trees both one and two year were, however, in ample supply to meet the demands of prospective trade.

THE PRESIDENT'S ADDRESS

The president's address opened with the thought "What can we do to elevate our business to a higher plane, establish it on wider and deeper business principles, and standardize it?"

OUR OPPORTUNITY

"The world is our market basket and the people are growing more fond of feeding from it. The foreign and domestic demand for the fruits of our labor, is growing all the time.

"Our western red apples have a reputation around the globe.

"This is an age of big business, and the nursery business is no exception.

"The legitimate nurseryman no longer depends upon a new field of operation each year for his business. He has an established trade and works to the end of holding and enlarging that trade.

"He is trying each year to give his customers better trees, better grades, better packing, and more of them. He is surrounding himself with better facilities, better employees, more skillful labor, and more conscientious salesmen.

"The nurserymen have planted their business on higher planes of business ethics, demanding and receiving the proper and respectful consideration of the business world.

TRANSFORMATION

"Many 'side issue' nurseries have gone, many more will go, the dealer is passing, and the business is going to concentrate in the hands of larger and more responsible concerns.

"The man or corporation achieving large success in the nursery business henceforth will find it necessary to devote his entire efforts to nursery lines.

"The trade is enlarging, the buyers are gradually learning that often the cheapest is the dearest tree.

OUR INSPECTION LAWS

"Our inspection laws are improving and they will continue to improve as our law makers become better acquainted with the nurserymen and the needs of the people along this line.

"The inspectors and nurserymen are fast being changed from enemies to the best of friends. Inspection is right, but inspectors, may be wrong sometimes and so may the nurserymen.

"The wholesalers should not enter the domain of the retailers and unload at prices so ruinous that they cannot give their customers clean, merchantable stock.

LEGISLATION

"It is possible for our association to do much toward guiding the legislative committees to wholesome and sane laws, bearing upon our interests.

TRANSPORTATION

"I desire especially to call attention to express rates, and am of the opinion that handsome concessions may be obtained, especially on large shipments, if taken up in time.

"Toward the close of the shipping season much rush business comes in that must be handled by express. There is then no time to advertise rates as provided by inter-state commerce, therefore, to be effective our work on such

matters should begin at least sixty days before the shipping season opens.

GRADES AND GRADING

"I recommend that the members of this association make continued effort to keep grades up to the standard adopted by our association at the San Jose meeting.

"Grades should be the same each year. Should the season be unfavorable the nurseryman should not lower his grades, rather make fewer number one and maintain a standard grade. The trade should understand that number one always means one and these should be all of the same caliper or height each year.

REPLACING

"This word should be obliterated from the nurseryman's vocabulary."

Owing to the unavoidable absence of Dr. John A. Widtsoe, president of the Agricultural College of Utah, Logan, Utah, his paper 'The Nurseryman's Opportunity' was read by Prof. J. C. Hook. Dr Widtsoe prophesied that ultimately the center of population in the United States would not be very far from Salt Lake.

The founders of Utah advised immigrants to follow agriculture rather than mining; discussed dry farming; stated the belief that the time is coming when the Pacific slope will lead in fruit production. The horticultural future rests with the nurseryman. He should be the chief adviser of his customers. The nurseryman should be in close touch with the teachers in the state and United States stations. Of all men in the West the nurseryman should be noted for the most rigid honesty in the shipping and billing of stock.

In conclusion, the Doctor expressed himself as proud of our nurserymen.

F. H. Wilson of Fresno discussed the same topic and stated the time is rapidly coming when the honor, integrity, and honesty of the nurserymen shall be above question. The nurseryman should be the guide, the friend and adviser of the planter; should guide in the selection of varieties and should advise planters as to suitable soils and favorable conditions.

Fred T. Howard of Los Angeles, California, read a very interesting paper discussing the most desirable as well as some of the newer varieties of roses, and detailed their methods of propagation. The gentleman also presented samples illustrating his methods of propagation, indicating the possibility of securing an excellent root system.

It was voted that the next convention should be held at Portland, Oregon, and Albert Brownell of Portland, Oregon, was elected president.

At the election of officers a vice-president was named for each state represented. Those elected were B. H. Bower for Utah; Fred T. Howard for California; H. A. Lewis, Oregon; Charles T. Hawkes, Idaho; C. F. Breithaupt, Washington; Byron Smith, Arizona; D. J. Tighe, Montana; Richard Layritz, Victoria, B. C.

C. A. Tonneson of Tacoma, Washington, was re-elected secretary-treasurer by unanimous vote. The following were chosen to comprise the executive committee: George

C. Roeding, Fresno, California; M. McDonald, Orenco, Oregon; and M. B. Sowles of Salt Lake City. A committee comprising President A. Brownell, George C. Roeding and past President P. A. Dix was appointed to conduct the experiments and advisory work.

Thursday afternoon the nurserymen took a trip in a special train to the copper mines above Bingham. Fifteen thousand tons of ore are daily mined, conveyed to the reduction works and finally to the smelters at Garfield. The mine is a mountain mass of ore containing one and seven-eighths per cent of copper. A car load of high explosives is used daily. The cars are loaded by steam shovels.

To enable a large number of men to work and many cars to be loaded at the same time, tracks one above another are cut into the face of the precipitous mountain. This is regarded as the largest mining enterprise in the country. The cost of producing the copper ore is about eight cents a pound, while it is worth in market from twelve to fourteen cents.

Friday morning some twenty-five nurserymen accepted the invitation of the Davis County Nurseries to visit their plant at Roy, Utah, eight miles from Ogden. These gentlemen are cultivating something more than five hundred acres of excellent land, and have a very complete equipment of buildings suited to their work.

The nurserymen were very pleasantly entertained, supplied with an excellent dinner, and sent forward in their respective ways on the afternoon trains. The dinner and the opportunity to inspect these nurseries was very greatly enjoyed by such nurserymen as could take time to avail themselves of this very pleasant trip.

E. F. STEPHENS,
Nampa, Idaho.

THE FRUIT CROP IN NEW YORK

Mr. E. C. Gillett, Secretary of the New York State Fruit Growers' Association, has sent out a circular under date of July 1, giving estimates of the fruit crop in the state for the present year. Apples form the largest crop with most members of the Association, and of these it appears that there will be a large crop in Western New York and a rather light yield in the eastern part of the state. The percentage of an average crop of winter apples is estimated at seventy, eight per cent higher than last year at this time. Five counties of Central-Western New York, Ontario, Seneca, Yates, Genesee, and Wyoming, average eighty-three per cent.

In pears the estimate is thirty-four per cent, with not much variation in different parts of the state. Seckels are very scarce, while Kieffer and Dutchess will be plenty. Chautauqua shows only half the usual crop of grapes, but several other counties give a more promising estimate.

Brief notes from other states are included in the report. Good apple crops are promised in Missouri, Michigan, Virginia, West Virginia, and Delaware. In some parts of Pennsylvania growers look for a good crop of apples, though in many parts cold, wet weather during the blooming period was disastrous to fruit prospects.

REPORT OF COMMITTEE ON ROOT GALL TO THE AMERICAN ASSOCIATION OF NURSERYMEN

E. A. SMITH, Lake City, Minn., Chairman

While the past year has not been an eventful one in our department, it has been one of satisfactory results, secured largely through practical experiments, as reported by nurserymen and state experimental stations. These experiments are scattered over a wide area of country.

Following is a list of Chairman of Committees appointed in different states: Geo. C. Roeding, Fresno, Calif.; L. A. Berckmans, Augusta, Ga.; C. T. Smith, Concord, Ga.; A. E. Robinson, Lexington, Mass.; C. M. Hobbs, Bridgeport, Ind.; Guy A. Bryant, Princeton, Ill.; J. H. Skinner, Topeka, Kans.; R. J. Bagby, New Haven, Mo.; E. A. Smith, Lake City, Minn.; D. J. Tighe, Billings, Mont.; G. A. Marshall, Arlington, Nebr.; J. Van Lindley, Guilford, N. C.; J. A. Lopeman, Enid, Okla.; Oregon Nursery Co., Orenco, Ore.; Abner Hoopes, West Chester, Pa.; Geo. H. Whiting, Yankton, S. D.; H. W. Chattin, Winchester, Tenn.; J. S. Kerr, Sherman, Texas; Washington Nursery Co., Toppenish, Wash.; Orlando Harrison, Berlin, Maryland; E. S. Welch, Shenandoah, Ia.; T. J. Dinsmore, Troy, O.

Several of this committee have lent active support, and have either set out trees for experimental purposes affected with root gall, or been instrumental in securing the coöperation of state experimental stations in this work. So far as we have been able to learn, all of the Committee are of the opinion that there is now but little to do except wait for time to determine the result of experiments already begun. This will result in an accumulation of valuable material for future reference.

If these experiments had been commenced twenty years ago, the relation to the cause and effect of gall upon apple trees would now be practically settled.

Nurserymen cannot afford to work for the present alone, they must look to the future. It takes time to grow trees, it takes time to determine the result of experiments. We must then be content to work and wait. It would still be advisable to undertake additional experiments, and we trust that many nurserymen will see their way clear to assist in this work, directly or indirectly.

Any information which will be of value to the Committee upon root gall should be reported either to the Committee appointed in that state, or to the Chairman of the Committee, who will be appointed by the Association. A record should be kept as complete and clear as possible for the benefit of parties interested. We believe the sentiment of inspectors is changing to a considerable extent, regarding the damage actually resulting, especially from the hard form of root gall upon apple trees.

EXPERIMENTS INSTALLED

The following experiments have been reported as being undertaken the past year. If other experiments have been undertaken they should be reported to the Committee at once, for record.

In Alabama, The Chase Nursery Co., of Huntsville, were instrumental in getting the State Experimental Station, located at Auburn, Alabama, to undertake experiments.

In California, The Fancher Creek Nursery, located at Fresno, Calif., of which Mr. Geo. Roeding is on the Committee, have undertaken extensive experiments with peach, prune and almond trees.

In Georgia, Mr. P. J. Berckmans, of the Berckmans Nursery Co., Augusta, Ga., was instrumental in securing coöperation of the Experimental Station located at Experiment, Ga.

In Iowa, E. S. Welch, of the Mt. Arbor Nursery Co., has undertaken experiments which will be of special value. Mr. Welch advises that he has set out several hundred trees. They will be dug from time to time, and careful reports made upon them. The entire planting consists of 120 Jonathan trees with soft crown gall, 80 Jonathan with hard gall, 200 Wealthy, practically all hard crown gall, 20 healthy Jonathan in another plot alongside the diseased trees. These trees were selected by Prof. Lorenz Greene, Experimentalist, and Dr. Buchanan, Bacteriologist, of the Iowa Experimental Station, Ames, Ia. The experiment is being conducted under their direction.

In Montana, D. J. Tighe, of the Montana Nursery Co., located at Billings, is also undertaking interesting experiments, which will be reported upon from time to time.

In Massachusetts, Mr. A. E. Robinson, of the Breck-Robinson Nursery Co., Lexington, Mass., reports that up to this time he could not see any difference in the growth of apple trees affected with root gall, and those not affected. He has a number of trees under observation that will be reported upon.

The Jewell Nursery Co., Lake City, Minn., who commenced a series of experiments in 1905, report of which, in detail, has previously been placed before this Association, and is now in printed form, have further continued their experiments by planting out a lot of trees the spring of 1911.

Three year old trees planted with root gall, spring, 1905, which were dug in the fall of 1909, and again transplanted in the spring, 1910, have made splendid growth, and blossomed this spring. These trees are now nine years old from graft, have been twice transplanted, are about four inches in diameter, healthy and vigorous. They compare very favorably with other trees transplanted at the same time, which were not then affected with root gall.

In Oregon, Mr. M. McDonald, of the Oregon Nursery Co., Orenco, Ore., advised that he would go into the subject thoroughly, and take the matter up with the Agricultural College at Corvallis, which had agreed to plant out one hundred trees for experimental purposes. At the convention held at Salt Lake City the first week in June of this year, Mr. McDonald took up the question of nursery inspection from the standpoint of the nurseryman, and good results will, no doubt follow.

J. VAN LINDLEY NURSERY CO.

DOUBLE-FLOWERING
DOGWOOD



POMONA
N. C.

Lindley's New Double-Flowering Dogwood



THROUGH the entire South, and in most parts of the North, the Flowering Dogwood is a familiar object in park plantings and on the grounds of large estates. In the mountain regions of the Blue Ridge system, as well as in other parts of the state, and as far north as Massachusetts, the shrub is found growing wild on the slopes among taller trees and other shrubs. The variety with which we are all familiar is known botanically as *Cornus florida*, although other varieties are grown in ornamental plantings.

Several years ago a gentlemen living in Orange County, North Carolina, noticed a small tree of the Dogwood family blooming with others in the woods near his home. The peculiar form of the flowers attracted his attention, and the tree was cared for several years, when it was brought to the attention of Mr. J. Van Lindley, who at once recognized it as an entirely new species of Dogwood.

Propagation by budding began immediately. This work has been continued without interruption until, at the present time, we have several thousand of the little trees in splendid growing condition, varying in height from three to six feet, and with a root-system which will insure successful transplanting to any part of the country where the Dogwoods are grown.

A number of the trees first budded from the parent have been grown under trying conditions, so that we might know whether this new species would prove hardy and satisfactory in low temperatures and in poor soil. These trials have shown the Lindley New Double-flowering Dogwood to be as hardy as the old variety, *Cornus florida*. The newcomer has withstood a temperature of six degrees above zero without losing a twig.

The tree is really a prettier grower than the common Dogwood. When full grown it is from fifteen to twenty feet tall, and unusually symmetrical—the branches forming an almost perfect globe of flowers and foliage. The foliage is similar to that of the other species, dark green on the upper side of the leaf, with a whitish green under-surface. In the autumn the foliage is beautifully colored with scarlet and crimson.

Lindley's New Double-flowering Dogwood is more satisfactory than the old varieties, for it blooms more freely than any of the others. The flowers are pure white, with double center, and larger than those of the old, familiar variety. The engraving of the flower on the opposite side of this page is about two-thirds natural size, but very plainly shows the type of the flower. The tree comes into bloom in April and May, at about the same time as the other Dogwoods. The habit has been carefully observed at each blooming season, and we are sure that the type is thoroughly fixed—all the flowers coming double.

Lindley's New Double-flowering Dogwood grows in shaded places as well as in the full sun, and is not particular as to what kind of soil it is planted in—sand, clay, loam are all the same to this hardy new species. The picture on the other side of this page was made from a two-year-old tree in our nursery, and we want you to notice particularly the straight, tapering trunk, and the form of the head.

The root-system is not an actual photograph, but is the artist's conception, as the photograph was made before the burlap was taken off, the tree having been shipped from Pomona, N. C., to Harrisburg, Pa., in full bloom, in order to get a photograph in actual colors. This is an *average specimen* from the field, and was not selected because of any unusual features. We will fill our orders with trees that are equally good in all respects. Some of the trees, however, were budded higher than others on the stock and have more of a tree effect. You might state which you prefer, high- or low-budded, and we will give it to you if possible.

Ask for quotation on large or small quantities

J. VAN LINDLEY NURSERY CO., Pomona, N. C.

In Pennsylvania, Mr. Abner Hoopes of Hoopes Bro. & Thomas Co., West Chester, started an experiment spring, 1911, taking photographs of trees before they were planted, and as these are dug from time to time, reports and photographs will be taken, and records kept, which will have a permanent and definite value.

In Texas, Mr. John S. Kerr, of the Texas Nursery Co., located at Sherman, has been active in this work, and advises that parties took the matter up with the A. & M. College of Sherman, Texas, under Prof. A. S. Ness, assistant to Prof. B. Youngblood. This experiment consists of perhaps two or three hundred trees, and one hundred that were not galled. A report of the result of this work to date has not been made to the Committee.

Your Chairman has furnished such information as he could to various inquiries, and has supplied the attorneys in the W. C. Reed case with material relating to gall on apple trees, for their reference in the suit brought by W. C. Reed, against an inspector in the State of Colorado who destroyed several thousand apple trees, reported to have been affected in part with gall. This case is one in which every nurseryman has a direct interest, a case in which your Chairman believes an appropriation should be made in helping Mr. Reed prosecute the case, as it is not one of individual interest alone, but will be far-reaching and national in its results.

Your Chairman also suggests that a fund be set aside by the Association each year, on the basis of not less than 10 per cent upon all membership fees collected by the American Association, the use of which should be subject to the approval of the finance or executive Committee, for protecting the interests of nurserymen in legislation, or unjust discrimination by inspectors.

The individual nurseryman is isolated, he is only a unit. His case may be a clear one, but the amount involved will not warrant his prosecuting it. The principle involved may be important and far-reaching, but the individual nurseryman may not have the means to go into the courts and establish the principle as an individual, whereas if the nurserymen as a whole were united, the cost would be but little, the result secured large.

The Chairman of this Committee takes this opportunity to thank other members of the Committee for their prompt and willing support during the past year.

Correspondence

Editor NATIONAL NURSERYMAN:

In writing on the Law and the Nurseryman I was treating the subject from a California standpoint, mainly, although I endeavored to show that the whole subject of insect control should be handled in a much broader way, as regarding inter-state and inter-county quarantine. You refer to the "radical demands of the Pacific Coast Nurserymen, or their representatives." I would say that the radical views to which you undoubtedly refer were opinions expressed by a gentleman from Southern California, largely interested in citrus growing. This gentleman delivered an extempore address at the Fruit Growers' Convention relat-

ing his experience while working with the representatives at Washington in reference to the Simmonds bill. He in no way represented California nurserymen, or any nurserymen, but he condemned the nurserymen as a whole in unqualified terms as obstructing any legislation which would tend to safe-guard the fruit interests of the United States against importation of pests or plant disease.

My remarks as to the importation of foreign ornamental trees or the importation of fruit had reference to the needlessness of such importations, and had no reference whatever to the importation of fruit tree stocks, seedlings, or any other nursery stock which is required in the business. In fact in California we are absolutely dependent upon European importation of most of our fruit stocks. I do not think, however, that it is necessary for nurserymen either in the east or here to encourage the importation of ornamental trees and shrubs from abroad. We certainly can grow them in the United States, and I believe that all that we can grow here we should grow. To encourage importing firms is to set up a large element of competition to what I would call the legitimate nursery trade in the United States.

I am not familiar with the details of the Simmons bill or exactly know in what state it now is, but I am of the impression that our interests in California and the interests of what I would call the legitimate nurserymen or growers of the east are the same. I do not class the nurserymen with the importing firms, and I think that nurserymen throughout the country should everywhere be encouraged to propagate and disseminate the native growth of trees and shrubs. With our diversified climates from Florida to the north, and again on the Pacific Coast, with all intermediate climates and soils, we certainly do not need to import ornamental shrubs and trees from Europe. In fact, we already have all of those trees and shrubs growing in the leading nurseries throughout the United States, and certainly can propagate from them. In the meantime let educational work go on relative to a better knowledge of native plants and trees.

LEONARD COATES.

[Mr. Coates paper will appear in our next issue.—ED.]

Editor NATIONAL NURSERYMAN,

Dear Sir:

I have sold my nursery business to A. R. McDougall, at my old stand, 3011 Westminster Road, Vancouver, B. C.

I am traveling most of the time, and have bought a place in California to winter on, where I have been planting oranges, lemons, etc., in order to grow my own lemonade, also a few grapes to grow temperance wine with. So call around next winter and I will entertain you.

I do not keep in touch with THE NATIONAL NURSERYMAN, being on the road so much, and it is like bidding good-bye to an old friend (sort of a business obituary for M. J. H.) so kindly discontinue, but with best wishes to the NATIONAL NURSERYMAN, I remain
Truly yours,
Chilliwack, B. C.

M. J. HENRY.

FLOWER SHOW AT ASBURY PARK

The third annual flower show by the city of Asbury Park and the Elberon Horticultural Society took place July 3, 4, 5, and 6, in the Asbury Park Auditorium.

Business Movements

WILLIAM STARK NURSERY COMPANY

This is an offshoot of the Stark Brothers Nurseries & Orchards Company of Louisiana, Missouri. Its headquarters are at Chester, Missouri, where it is being managed at the present time by William H. Stark, son of Ex-president W. P. Stark of the American Association of Nurserymen. We understand that Mr. Stark, Sr., is to associate himself with the new firm, which is to conduct a high class, up-to-date mail order business. No agents will be employed. The business is to be carried on direct with the planter. The new company has secured a tract of some four hundred acres, which is said to be admirably adapted for the growth and cultivation of high class nursery stock. Fruit trees and ornamental plants will be specialized in. Of the latter, herbaceous perennials will occupy a prominent place. Mr. Stark is enthusiastic about his location, believing that the soil is unusually fine for growing nursery stock.

MUSKOPF & IRISH COMPANY

After a connection with the Missouri Botanical Garden as Superintendent and Horticulturist covering a period of eighteen years, Mr. H. C. Irish has left this work to form a partnership with Henry C. Muskopf under the above name. The firm is now conducting a business as landscape architects and engineers at 709-711 Title Guaranty Building, St. Louis, Mo.

ORGANIZATION OF STARK BROS. NURSERIES & ORCHARDS CO., LOUISIANA, MO.

At the last meeting of this incorporation, the following officers were elected: E. W. Stark, president; L. C. Stark, vice-president; T. W. Stark, secretary; Eugene Duncan, treasurer; P. C. Stark, assistant secretary and assistant treasurer.

Obituary

JOHN ALLGOOD PETTIGREW

This noted landscape architect and park superintendent died in Boston on July second. He was born and trained in England, but has been in this country since 1865. He was sixty-eight years of age at the time of his death. Mr. Pettigrew did notable work in connection with Lincoln Park in Chicago. He was also associated with the development of the Milwaukee park system. As Superintendent of the Metropolitan system of Boston, his influence and skill were making themselves felt in an altogether beneficial manner. At the recent meeting of the American Association in Boston, Mr. Pettigrew was dangerously ill, but expressed his regret at his inability to meet his friends the plant growers.

"We don't know of a more interesting paper regarding the nursery line than yours."

B. W. DERKEN & Co.,
Juliana Nurs., Holland.

THE AMERICAN SWEET PEA EXHIBITION

Boston July 13-14, 1912

Despite the long drought and severe hot spell, the fourth annual exhibition and convention of the National Sweet Pea Society of America, held in Horticultural Hall, Boston, July 13-14, was a success surpassing all previous shows in the number of entries and exhibits.

The center aisle of the main hall was lined with sweet peas growing in tubs and boxes from the Larz Anderson estate. Some magnificent specimen hydrangeas from the gardens of Samuel Whitman were grouped in the end of this hall. Another notable exhibit was a large number of splendid plants of *Lilium myriophylla* shown by R. & J. Farquhar. This firm also exhibited plants of *Nephrolipsis Rochfordii* and *Araucaria excelsa*, "Silver Wings." The Arnold Arboretum exhibited plants of *Lilium Bakerianum* and *L. Chinensis*. There were fine exhibits of Japanese irises from Dr. Harris Kennedy and the Mt. Desert Nurseries, hollyhocks from the Eastern Nurseries, orchids from Julius Roehrs, and Callas Auranti and Elliottiana from John Lewis Childs.

The exhibits of sweet peas were a revelation to many, especially to those who had contended that it was impossible to produce Spencer sweet peas to equal those of California. W. Atlee Burpee staged an exhibit in his usual unrivaled style. A. T. Boddington had a well arranged display. The Henry F. Michell Co., had a very attractively arranged exhibit in the lobby. Peter Henderson & Co. had a very large exhibit of well grown blooms. Thomas J. Gray and Fottler, Fiske, Rawson Co., Stumpp and Walter exhibited large collections. Joseph Breck & Co. exhibited hollyhocks, snapdragons and sweet peas.

In the competitive classes there was spirited competition. These exhibits filled the large lecture hall and the judges had strenuous work making the awards among the magnificent collections.

There were many entries in the table and mantel decorations, the bridal bouquets, hampers, corsage bouquets and centerpieces, using sweet peas.

An excellent feature of the show was the sweet pea exhibits made by the school children. Doubtless this would have been larger had the weather been more favorable. Some excellent flowers were shown.

The meeting held in Horticultural Hall on Saturday, July 13, was well attended. President Sim read his address, and the reports of the officers were presented. Dr. A. C. Beal read a brief report upon the work of the trial grounds at Cornell University. The report showed that a larger number of seedlings and new varieties were under trial than ever before. Mr. J. J. Taubenhause, of the Delaware Experiment Station, read an excellent paper on "Our Present Knowledge of Sweet Pea Diseases and Their Control." The Society voted to change the name to the American Sweet Pea Society. The following officers were elected: President, William Sim, Cliftondale, Mass.; vice-president, J. C. Vaughan, Chicago, Ill.; secretary, H. A. Bunyard, New York, N. Y.; recording secretary, J. H. Pepper, New York, N. Y.; treasurer, A. T. Boddington, New York, N. Y. Boston was again selected as the place of meeting.

INCORPORATED

Basin Wyoming. Wyoming Nurseries & Orchards Co., capital stock, \$20,000.—*Horticulture*.

Messrs. J. Heins' Sons were represented at the Boston convention by Mr. Heinecken.

Messrs. Schaum & Van Tol, Boskoop, Holland, through their American agents, Messrs. McHutchison & Co., are offering a very comprehensive list of ornamentals for fall delivery, 1912, and spring delivery, 1913.

KEEP AT IT

One step won't take you very far.

You've got to keep on walking.

One word won't tell folks who you are,

You've got to keep on talking.

One inch won't make you very tall,

You've got to keep on growing.

One little ad won't do it all.

You've got to keep them going.—*The Novelty News*.

IRIS! IRIS! IRIS!

We have one of the largest collections of these glorious flowers in the country in 170 varieties, comprising some of the finest on earth. Send for prices.

The 25 cent Iris Manual for a two cent stamp to pay postage.

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WILLOW IN RIVER PULLED SEEDLINGS,
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Young Evergreens

Inspection cordially invited

Correspondence solicited

Catalogue and Private Code on demand

Situation Wanted

Young man wishes position in lively and up-to-date nursery; capable of taking full charge, thoroughly understands all kinds of propagating and planting. At present foreman of one of Chicago's leading nurseries. First-class reference. "M" care NATIONAL NURSERYMAN.

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NURSERY MANAGER for Mail Order Business; one who is familiar with conditions in the Northwest. Married man preferred. Good dwelling house on place. Splendid opportunity for the right man with some capital. Apply "K"

Care of NATIONAL NURSERYMAN.

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First class budders and grafters. Position permanent if can do satisfactory work. Single men preferred.

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FOR SALE

BY THE OWNER, well established retail and wholesale nursery in the middle northwest. Will sell plant on easy terms or a $\frac{1}{3}$ interest to reliable party. Business interests in another line make the sale advisable. Write for particulars.

Box 38, YANKTON, So. Dak.

WANTED

A good, all-around nurseryman. Married man preferred. Must be familiar with ornamentals and fruits; be capable of handling orders and handle large bunch of men. Only a man who would consider the interests of his employer will be considered. Permanent position to the right person. A good cottage, firewood and ground for garden furnished. State salary, experience and give full references in first letter.

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Only one in 5 southern counties of the state growing a general stock; in a *FIRST-CLASS* location and fine transportation, close to large cities, Philadelphia 38 miles. Will make reasonable terms, as I can not give it the proper attention.

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WANTED

1000 Cherry $\frac{3}{4}$. Peach in exchange preferred. Also have to offer 17000 Silver Maple 1-2"; Moore Early Grape 1 yr.; Mersereau B. B. root cutting plants; 20000 Houghton Gooseberry Layers; 10000 Peach, extra fine, $\frac{1}{2}$ to 1 inch. Address

THE CREVE COUR NURSERIES, Creve Cour, Mo.

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Best Qualities, Guaranteed New Crop

For lowest prices apply to

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Seeds of Best Quality. Guaranteed New Crop.

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Two Year Trees. All stock is making fine growth. Write for prices and list of varieties. Send in your want lists.

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Seeds of the very best quality at low prices should write
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250,000 Manetti Stocks first grade, grown on sandy ground and guaranteed
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25,000 Pinus cembra, from 6 in. to 3 ft.

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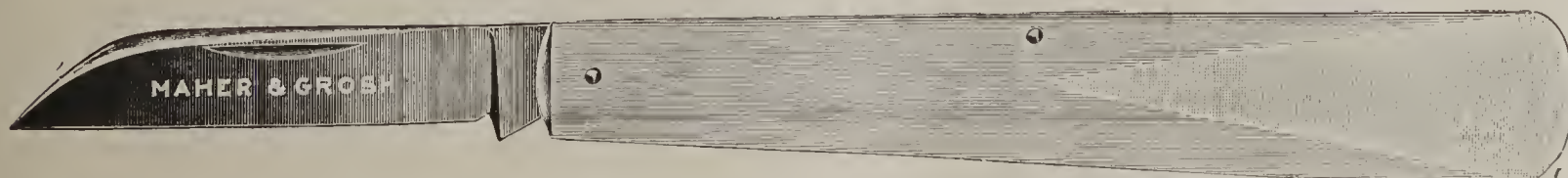
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White Spruce

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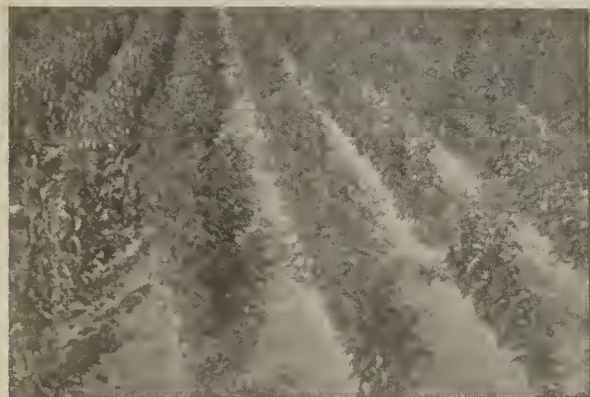
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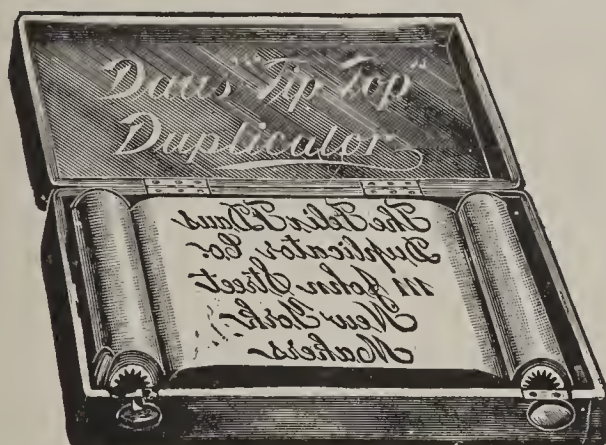
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Harrison's Nurseries Grow Evergreens and Ornamentals as well as Fruit Trees

This picture shows a small section of the fields where we grow evergreens. This is a block of Norway Spruce; in an adjoining field you will find Blue Spruce, and further on are blocks of Firs, Pines and Arborvitae.

We have told you about the soil, the climate, and the effect which the salt air has on fruit trees, and how the same influences are at work to make Harrison's Ornamentals as healthy, sturdy and strong as the fruit trees that have made our nurseries famous. Our stock includes Colorado Blue, Koster's Blue and Norway Spruces, American Arborvitae, Pyramidal Arborvitae, Cypress "Glory of Boskoop," Norway, Silver and Sugar Maples, Oriental Plane, Carolina Poplar and Catalpa Speciosa and many other evergreen and deciduous trees. We can supply these in almost any quantity. Write for quotations.

The list of Fruit Trees as given here will permit you to replenish your stock before fall delivery. If what you need is not included, write us and we will tell you whether we can supply them.

APPLES

One Year Budded

American Golden Russett.....	1200
Alexander	1200
Baldwin	27000
Ben Davis	7000
Benoni	250
Belleflower	300
Bismarck	100
Coffelt Beauty	100
Cooper's Market	100
Carthouse	150
Chenango Strawberry	225
Dominie	250
Duchess	6500
Delicious	275
Ensee	300
Early Colton	125
Early Harvest	3000
Early Strawberry	250
Fall Pippin	250
Fanny	100
Fallowater	750
Fourth of July	1000
Fameuse	1200
Grimes' Golden	10000
Gravenstein	2500
Golden Beauty	250
Gano	6000
Ingram	200
Jeffries	100
Jonathan	7000
Kennard's Choice	150
King	2500
Longfield	100
Lankford	75
Lawver	100
Limbertwig	150
Myrick	275
Missouri Pippin	300
Mammoth Black Twig	12000
Mann	100
McIntosh Red	10000
Maiden's Blush	650
Nero	1400
Northern Spy	3000
N. W. Greening	1500
Porter	100
Pewaukee	80
Paradise Winter Sweet	1100
Rome Beauty	16000
Rawles Janet	150
Red Astrachan	4000
Rolfe	175
Red June	250
R. I. Greening	1200
Rambo	1200
Stayman's Winesap	60000
Sarr	2200
Smoke House	1000
Smith's Cider	250
Scott's Winter	200
Salome	150
Springdale	150
Stark	3000
Sweet Bough	1000
Spitzenburg	1250
Tallman's Sweet	1000
Wealthy	8000
Walbridge	250
Winesap	16000
Wolf River	3000
William's Early Red	3000
Winter Banana	3500
Wagner	900
York Imperial	60000
Yellow Transparent	16000

CRAB APPLES

Hyslop	275
Martha Crab	250
Transcendent	2000



APPLES

Two Year

Aiken	50
A. G. Russett	400
Arkansas Black	200
Apple of Commerce	40
Baldwin	12000
Ben Davis	4000
Bismarck	30
Benoni	40
C. R. June	400
Carthouse	40
Coffelt	25
Cooper's Market	50
Canada Red	25
Chenango	50
Dutchess	2500
Dominie	50
Early Strawberry	200
Early Harvest	2500
Early Melon	40
Fallowater	500
Fanny	20
Flora Bell	40
Golden Sweet	150
Gravenstein	2000
Hubbardston	1000
Ingram	40
Jeffries	40
King	150
Kinnards	40
Lawver	150
Longfield	30
Late Raspberry	45
Jonathan	1250
Missouri Pippin	900
Mann	400
Myrick	50
Nero	1500
N. W. Greening	2500
Opalescent	75
P. W. Sweet	450
Paynes	40
Pewaukee	50
Rambo	500
R. I. Greening	2500
Roman Stem	30
Red Astrachan	4000
Sweet Bough	50
Smith Cider	400
Stark	1500
Spitzenburg	2500

APPLES—Continued

Salome	25
Senator	35
Sutton Beauty	25
Springdale	30
Townsend	40
Virginia Beauty	50
Walbridge	200
Wealthy	2500
Wolf River	1250
Winesap	4000
Winter Banana	750
Yellow Transparent	15000
Yellow Belleflower	500
York Imperial	25000

CRAB APPLES

Golden Beauty	1000
Hyslop	750
Transcendent	1000

QUINCES

Champion, 2-3 ft.	500
Orange, 2-3 ft.	500

CHERRIES

Two Year

Baldwin	1000
Black Tartarian	1500
Early Richmond	10000
Gov. Wood	1000
Montmorency	4000
Napoleon	1000
Schmidt	1000
Windsor	1000
Yellow Spanish	1000

PEACHES

One Year from Bud

Ark. Beauty	300
Alexander	200
Admiral Dewey	2000
Belle of Georgia	25000
Ber Smock	2500
Bilyeu's Late	2500
Bray's R. R.	250
Crosby	200
Connett's So. Ey.	200
Captain Ede	200
Cornelia	50

PEACHES—Continued

Chinese Cling	250
Carman	15000
Chair's Choice	5000
Champion	5000
Crawford Early	2500
Crawford Late	5500
Elberta	70000
Edgemont Beauty	500
Engles Mammoth	1500
Ford's Late White	1000
Frances	1500
Fitzgerald	1500
Poster	500
Fox Seedling	3000
Geary's Hold On	2000
Gold Drop	250
Globe	300
Greensboro	2500
Heiley	1500
Harrison Cling	250
Iron Mountain	3000
Jackson Cling	200
Klondyke	500
Krummel's Oct	950
Kalamazoo	1250
Levy's Late	200
Late Elberta	250
McCollister	200
Miss Lola	175
Mountain Rose	2000
Moore's Favorite	1500
Mamie Ross	1000
Mayflower	1400
Matthew's Beauty	200
Marshall	200
New Prolific	1000
Niagara	1500
Old Mixon Free	500
Picquetts Late	250
Prize	250
Reeve's Favorite	2500
Ray	25000
Sneed	200
Sunrise Cling	250
Stinson's Oct	250
Salway	6000
Stump	3500
Stephen's Rarripe	1300
Slappey	1500
Triumph	150
Wilkin's Cling	1100

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J. G. HARRISON & SONS PROPRIETORS
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Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

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THE NATIONAL NURSERYMAN



SEPTEMBER, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

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CHERRY and STD. PEAR

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1500 Acres

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2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8, 8 to 10, 10 to 12 ft.

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all sizes.

100,000 CURRANTS, Red and White.

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THREE YEAR APPLE in all Hardy Varieties.

THREE YEAR CRAB
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YELLOW DOGWOOD
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Norway and Schwedler Maples, Tili-
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 careful selection, best packing from Union
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SIMPSON

is the name of the men who grow the finest

CERRY

that can be produced by suitable soil, climate and
 expert knowledge.

Take a look at the stock or ask for a sample and
 be convinced of the extra quality of their

TREES

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APPLE—1 year, 2 year and 3 year
 AMERICANA PLUM ON PLUM
 COMPASS CHERRY ON PLUM

H.M. Simpson & Sons

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For Winter and Spring Orders

**WE OFFER THE FOLLOWING FROM
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- 4000 Mulberries, mostly of Hicks variety, smooth and free
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- 15000 Figs, mostly of the Celeste and Lemon varieties.
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- 10000 Roses, Teas, Hybrid Teas and Climbers, all grafted very
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- 6000 Biota Aurea Nana, sizes 18 inches up.
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- 25000 Chinese Arborvitae Seedlings, 2 and 3 year, 6 inch to
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- 5000 Muscadine Grapes.
- 20000 Trellis Varieties Grapes.
- 70000 Camphor Trees, sizes 1 to 3 ft.
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- 3000 Texas Umbrella, sizes from 4 to 8 feet.
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A general variety of Orange and Grape Fruit Trees.
 Could also supply limited quantities of general list of Fruit
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Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,
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Norway Maples

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APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
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PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

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700 Acres

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Grown as STANDARDS with strong, straight stems and well-branched, well-balanced tops; forty varieties, single and double, all shades from purest white to darkest purple. A profitable *specialty* for agency and catalog houses.

J. & P. Tree Hydrangeas were the first home-grown standards on the market. Our **Tree Lilacs** are becoming even more popular.

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Sold to the Trade only

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OFFER A GENERAL ASSORTMENT
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings
Shade and Ornamental Trees

IN LARGE QUANTITY

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Heikes --- Huntsville --- Trees



**Huntsville
Wholesale Nurseries**

Huntsville, Ala.

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We offer for Fall of 1912 and Spring of 1913 in large quantities as usual:

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APPLES—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.

PEARS—Kieffers, one and two years old. A much smaller crop than heretofore.

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CHERRIES—On Mahalcb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

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See Price List for Particulars.

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EVERGREENS and CONIFERS, in several hundred kinds and varieties

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HARDY VINES and **CLIMBERS** in pots

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AUTUMN BULBS, Dutch, French and Japanese kinds

Interior and Exterior **DECORATIVE PLANTS**, in a large variety

PLANT TUBS, in all shapes and sizes. Ask for special list

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SEND IN YOUR LISTS FOR QUOTATIONS

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We offer a complete list of **FRUIT SEEDS** and **SEEDLINGS** this year. Send for a copy of our list showing varieties, sizes and prices.

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OUR WHOLESALE TRADE LIST OF HARDY ORNAMENTAL NURSERY STOCK FOR FALL 1912 WILL BE READY ABOUT SEPTEMBER 15TH. BE SURE YOU GET A COPY.

THOMAS MEEHAN & SONS

WHOLESALE NURSERYMEN AND SEEDSMEN

DRESHER, PA.

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Largest Nurseries in Europe

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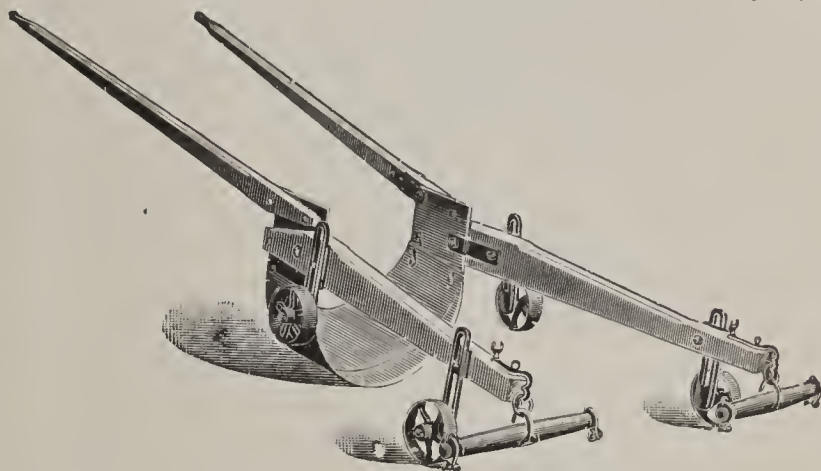
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Send for samples and prices. Our reference are the largest nursery men in the United States.

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Apple	Poplar Carolina	Ampelopsis
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Correspondence solicited. Price list upon request.

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Blackberry Rootcutting Plants, Eldorado, Erie, Ohmer, Rathbun. Raspberry, all leading varieties. Houghton Gooseberry Plants. Two hundred thousand Gooseberry Layer Plants. Asparagus, one, two and three year roots. One hundred thousand Rhubarb, one and two year roots, also divided. Horseradish Sets, etc. Write for Price List. P. D. BERRY, Dayton, Ohio

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THE CONNECTICUT NURSERYMEN'S ASSOCIATION IN NEW HAVEN, AUGUST 9th, 1912,
FOR THEIR ANNUAL SUMMER OUTING

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

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ROCHESTER, N. Y., SEPTEMBER, 1912

No. 9

ORIENTAL PEARS AND THEIR HYBRIDS

THE LATE PROFESSOR JOHN CRAIG

The story of the Oriental pear in America is one of surpassing interest to the horticulturist and fruit grower. A striking parallel is found in the behavior of the Oriental plum in this country. Both fruits failed to reach the stage of their highest usefulness until they had been combined with either American varieties, or varieties which had by long culture become well adapted to American conditions. The story of the Oriental pear in America is practically then the biography of the Kieffer, the LeConte, Garber, all hybrids between pure Orientals and American varieties descended from European types.

The Oriental pears as typified by the sand pear and snow pear of Japan and China, respectively, are noted for their vigor and productiveness, and are also characterized by their fruit of relatively low quality. This fruit varies very considerably in size, form and appearance. One of the better known types of the Japan pear has been called the Golden Russet, on account of its striking likeness to the apple of that name. The skin is covered with a beautiful buff coat of russet, and the fruit is quite apple-like in form. The stem is long and crab-like, although much stouter than the ordinary crab. The Chinese pear, on the other hand, is more pear-like in form, but possesses the same glossy, leathery leaves and vigorous habit of growth, which make these trees valued as much for ornamental as fruit bearing purposes.

Both Chinese and Japanese pears were introduced into this country at a comparatively early date. They came to us by way of England through the good offices of the Royal Horticultural Society in London, and the progressiveness of a noted New York nurseryman, Wm. Prince, the proprietor of the Prince Nurseries of Flushing, Long Island, the first nursery of any importance in the United States. Later importations were made by individuals in this country, and by French nurserymen. It is a curious fact that the Oriental pears have never attained a point of any commercial importance in Europe, yet in this country by a lucky combination, wholly by chance, we had produced a variety, the Kieffer, in the gardens of Peter Kieffer, who resided at Roxbury, near Philadelphia. Mr. Kieffer was for a number of years a grower of the Chinese sand pear. These were sold for ornamental purposes. In his garden there were also trees of the Bartlett variety. In examining adventitious seedlings which appeared from time to time in his garden, he was struck in one instance by the peculiar growth of a certain individual, and saved it. This tree bore fruit in due time. It was exhibited at the Massachusetts Horti-

cultural Society, and finally at the Centennial Exposition, where in 1876 it was given the name of the originator. It was then introduced by Wm. Parry of New Jersey. It soon sprang into popularity on account of its tremendous vigor and great productiveness. In the decade between 1890 and 1900, more trees of this variety were planted in the United States than of all other varieties combined. Orchardists were more or less Kieffer mad. The trees were set without reference to the region to which they were adapted, and while the tremendous productiveness of the variety in most cases enabled the owners to secure adequate returns as a rule, yet it was a serious mistake to plant this in sections where its parent Bartlett and others of that type succeeded.

Another pioneer in the production of hybrids between the Oriental and the American pear was Mr. S. F. Smith of Marietta, Ohio. He secured a variety of the Oriental type, Cincinco, in 1854. This Oriental pear was planted alongside a number of varieties of the European type, including Bartlett, Seckel, and Flemish Beauty. He then planted seed of his Oriental and in due time developed a number of hybrids, of which Smith's Hybrid, Dewey Premium, Commodore Perry, and Smith's Marietta are examples. None of these, however, have become as prominent or as valuable as Kieffer.

Kieffer, therefore, became the dominating variety in the decades between 1880 and 1900 in all the country east of the Rocky Mountains. But its region of greatest usefulness was found to be in the South, where it was set as a blight-proof variety. This cheerful fancy was later dispelled by the experience of the growers, who found that though Kieffer was freely attacked by blight, it did not succumb so rapidly to the disease as the European varieties.

The present region where Kieffer holds sway is in the Delaware Peninsula, and New Jersey. In the latter state, an inquiry made in 1899 developed the fact that the following varieties in the order given were the most popular: Kieffer, Bartlett, LeConte, Duchess, Seckel, and Lawrence. At this time sixty-eight per cent of the pear orchard area was set to Kieffer, twenty-four per cent to Bartlett, and the remainder to the other varieties mentioned.

This variety finds a congenial home throughout all the southern states, where its thick, leathery foliage enables it to stand heat and drought and makes it adapted to the hot weather conditions which prevail in that region. As far north as New Jersey and Missouri, it may be said to be

thoroughly at home. But it is now conceded that it is a mistake to plant it in the best pear growing regions of New York and New England; for in these sections, the amount of summer heat is insufficient to bring the fruit to its highest state of perfection, either as to quality or appearance.

The Kieffer has been the butt of the horticultural humorist at fruit growing conventions for many years, this on account of its tough, coarse flesh, and owing to the lack of the aromatic flavors which are present in high quality pears. When grown under unfavorable circumstances, the flesh is hard and coarse, with very little of the real pear flavor. On the other hand, when grown under favorable circumstances, properly ripened off the tree, the acidity tones down, the harshness of the flesh is softened, and the fruit is transformed into a really edible product. Kieffer, however, finds its greatest usefulness as a canning variety, and it would be difficult to say how many thousand boxes of Kieffers go on to the market each year bearing the well known label of Bartlett. And there is less fraud about this than might be expected, for in the canned form, made from properly grown fruit, the Kieffer is really an excellent fruit.

As to returns, it is probable that Kieffer orchards have yielded as high returns per acre as have been secured from any of the deciduous fruits. New Jersey reports gross returns all the way from \$56 to \$1200 per acre, with a general average of \$327 per acre.

THE DEMAND.—It is undoubtedly true that the demand for these pears has fallen off to a considerable extent during the past decade. This is due to a more widespread and accurate knowledge of the qualities of the fruit. At the same time, a good deal of unfairness has been shown towards the Kieffer, owing to the fact that it has been grown and is being grown in many localities entirely unadapted to its production. Then, frequently the fruit is handled in a manner quite unsuited to its requirements. All the Oriental hybrids should be picked while quite green, and should be ripened off the tree. If allowed to hang on the tree until fully ripe, the flesh immediately surrounding the core becomes gritty, hard and inedible, and the outside flesh becomes dry and mealy. If, however, the fruit is picked when it has reached full size, but before it has begun to take on the ripening process, and placed in a cool storage house, where it will ripen gradually, it colors up nicely, mellows down, and altogether is greatly improved by this treatment.

The point of this brief article is that the natural range of the members of this Oriental group lies south of New York; that in New York or New England, the fruit of Kieffer, and the same is true of the other members of the group, does not compare favorably with the product of these varieties as grown in Delaware, Maryland, and the states farther south. The requirements of the pear are a warm soil, and a summer temperature high enough and continuous enough to bring it to a thorough state of development. Growers in the Northeast should leave Kieffer and the like for those sections where this group attains its highest excellence, for the sufficient reason that as a rule they can grow varieties of better quality than are produced in the Kieffer regions, whereas in those southern sections the Kieffer is produced so easily and so much better than it is possible to grow it in the North, that

competition is futile. In the growing of pears, as well as in the production of apples, each region should study its own adaptations, and should aim to produce those varieties which attain their highest excellence in that section.

The Oriental pears have performed an excellent mission and are occupying a very important place in the pomology of the South. Their field of usefulness has not been exhausted, for the production of hybrids thus far has been largely a matter of chance and very little systematic or consecutive effort has been made to produce desirable combinations between the Oriental and the descendants of the European. There is here an unquestionably promising field for the hybridist, and we may look with considerable hope towards the future, believing that there are still better things to come from a union of these two races, than have thus far been secured.

SUMMER PRUNING

The practice of pruning trees and shrubs in summer time is practiced very little in this country. Occasionally we find that ornamental shrubs are given a stereotyped pruning sometime in late spring or early autumn which prunes off the tops of each shrub to a uniform height and without reference to the flowering habit of the plant. In some cases when late pruning is practiced, the flower buds are completely or nearly wholly removed. Summer pruning is a desirable practice wherever it may be thought necessary to thicken the growth of a bush or tree, and theoretically it is also a means of increasing the fruitfulness of plants. It is to be practiced with much more discrimination than winter pruning. When we prune during the dormant season, we remove superfluous shoots and shorten those that are over lengthy, all of which tends to increase vegetative vigor next spring. Summer pruning, on the other hand, acts as a retarding agent, and tends to make plants stocky and fruitful. In the case of the hedge, which is summer pruned, we find it thicken up at the base and perform its hedge functions more completely than before.

In our judgment, summer pruning can be applied to many of our fruit trees with excellent results. Peaches particularly are apt to run to wood, and summer pruning, which might consist of pinching back and checking the superabundant growth, would stimulate lateral branches, all of which would tend to greater fruitfulness. One of the difficulties, however, with summer pruning is that there are many other things pressing at the time, and as a result, it is likely to be neglected.

PAINFUL ACCIDENT TO PRESIDENT MEEHAN

Thomas B. Meehan, president of the American Association of Nurserymen, and James McHutchinson, New York City, have just returned from Europe where they have been for the last few weeks visiting nurseries.

A very interesting and enjoyable trip was somewhat marred by a painful accident to Mr. Meehan. The first day out from Cherbourg, while coming up the steps from the lower deck, he stumbled, breaking his knee cap. From present indications the fracture is knitting nicely so that he hopes to have the full use of his limb in the near future.

ORCHARD PLANTING

Its Possibilities and When It Will Be Overdone

An Address Delivered at the Tenth Annual Convention of the Pacific Coast Association of Nurserymen in Salt Lake City, June 5, 1912, by Henry W. Kruckeberg, Los Angeles, Cal.

The topic that my good friends in Utah have assigned to me is indeed a large one, fraught with educational and economic considerations of importance to the entire range of horticultural production, not alone as it applies and appeals to the individual and single communities, but to the country at large. Viewing the subject casually, most of us would be influenced, either positively or negatively, in opinion, by prevailing conditions in our own experience, for the battle of bread is after all the factor that touches vitally. If successful in our operations, both as to product and commercial returns, we are apt to be optimistic; if the contrary, judgment will be pessimistic. Again, many will view it within narrow bounds; in other words, from experiences met with during only a short period of time. Obviously, this cannot be reliable and is based on false premises. Pomology is not a vocation to be learned in a day; indeed, a full knowledge of a particular line of fruit production is never fully mastered in a life time. Verily, art is long and life is short.

Neither is orchard planting a new activity; it is so old that its records are buried in the limbo of forgotten things. History records the deeds of an Alexander and a Caesar, but it fails to tell us who first took the wild crab-apple from its native habitat and transplanted it to some Grecian or Roman hillside, and by selection, breeding, and manipulation, evolved the first eatable apples; nor does it record the first pomologist to treat along similar lines the olive, the plum, the fig, or the orange. Little we know of the experiences of the ancients in the art of plant breeding, pruning, cultivation, irrigation, and kindred operations. History is alike silent on quarantine regulations, bug inspectors, spraying outfits, and parasitic and injurious insects and plant diseases as they are understood in our day. Who knows but that Caesar, when bug inspectors invaded his orchards and gardens on the Tiber, quarantined the whole outfit in the arena where they contributed to the joys of a Roman holiday? Lucky Caesar! Of all these things of yesterday we know little, but we do know that through all the ages orchard planting has ever been an enjoyable and lucrative occupation of man. At no period in its history has it ever been admitted that its possibilities have been more than touched, much less ever fully attained or overdone.

Viewed from the postulate that there is compensation in all things; from the standpoint of man's contact with the universe—it is inconceivable that the science of pomology will ever be overdone. Indeed, from the experience of the plant breeder, the naturalist, and the scientist, a Darwin, a Lemoine, a Mendel, a Batson, or a Burbank, it has scarcely been scratched, and its possibilities are beyond the ken of the average human life.

But I take it that we are interested in the economic rather than the scientific and ethical phases of orchard planting possibilities. To be sure, the plant breeder and experimenter has his place, and a very important one it is too, from the fact that we have no product of orchard and vineyard, garden and field, but what is subject to improvement; if not in all sections, at least in one or more of growth, and many in its manipulation after nature has done her work. And in this endeavor, in which every fruit grower is educationally and commercially interested, who are the real workers—the factors that make field and orchard operations possible and successful? Plows and harrows, rakes and hoes, methods of doing things? No, these are mere incidents. The sentinels that stand for success are geology and chemistry—the air, the gentle rain, the soil, the clouds, the sun,—they make the tree and fruit possible. They work all the time, and only in their own way. Shall we say that in the sense that man has fellowshiped them to the full, that fruit production has reached its limits, either in economy of growing, or in quantity and quality, that its possibilities have been measurably attained? I trow not. What a vista for future exploitation and development this thought suggests! To mingle with the universe—all out-of-doors,—causing it to render full values when intelligently contacted!

Though man is an integral part of the universe, he only learns by contacting it at all angles, no matter what his occupation. This it is that leads to intelligent effort, and the accomplishment of desired ends. In this heredity lends an influence; man has a background in past experiences and behavior of his trees and plants recorded in the printed page. But individual environment and conditions are never quite alike, and so he is forced to use his initiative in the utilization of the lore of the past to meet the conditions of the present; and this leads to contact,—and of all vocations, who harbors nature in all her varying moods more closely than the plant breeder, the plant propagator, and the grower of orchard and field crops? Earth is his mine, and if intelligently worked will yield up her nuggets of pure gold; but woe to the man who misinterprets—negation awaits him, and in this she always teaches a lesson for future guidance. Hence, to contact her intelligently is the thing. Plant a pine tree out of its environment and it will perish, or at best live like a poor relation, always gaunt and hungry-looking; but follow her, and drop a cone in the Russian River Valley, and she grows a big tree, the wonder of the world, alike in its historical aspect and in its majestic size. In her own soothing but large way, she seems to say to you, "Treat me right, and I'll give you what you want."

Man contacts nature by changing the environment of a navel orange, transplanting it from Brazil, where it grows

well, but is shy in shipping qualities, to California, and by irrigation, under prevailing climatic conditions, produces not only a fine eating fruit, but the best shipping orange known to commerce. But the contact is limited. In Florida and Australia nature says, "Nay, nay, Pauline, that lovely form of yours belongs only to California." And yet, left alone to its own sweet will, this fruit fails of perpetuation. So intelligent contact not only has its place, but is part and parcel of the scheme of things as they are—it provides man an everlasting job where son succeeds father without contest of wills or the use of probate courts. Contact a Spitzenberg apple in Oregon and Washington and nature rewards you by augmenting your bank account; do it in other sections and she negatives your effort and reduces the bank account; plant raisin grapes in central California and a bountiful harvest insures you a living; do it in Utah and you are up against it. Again, man changes the native vegetation of Australia to California, and with it the white cottony cushion scale (*Icerya purchasi*), but without its natural enemy. Result, nature's equilibrium is destroyed, the white scale becomes established and almost ruins California's citrus industry, its onward march of destruction being finally stopped in the restoration of nature's balance by the introduction of the *Vedalia Cardinalis*, of blessed memory, and the scourge disappears. Again, California experiments with the fig, a native of Asia Minor, and finds the trees grow well. Many are planted but fail to produce a fruit the equal of that produced in its native soil. Again, the balance is disturbed. The Capri fig, the home of the fructifying fig wasp, is at first allowed to flourish where nature put it; later we import it also, but still no good curing fruit. Then it remained for our own Mr. Roeding, in conjunction with the Federal Department of Agriculture, to go to Asia Minor, exploit the little fig wasp (*Blastophaga grassorum*) which fertilizes the fruit, and presto change, nature's equation is re-established, and California now grows annually carloads of genuine Smyrna figs. And so many, many other instances of a like nature might be cited. In exploiting production by suiting the conditions to the fruit, and the fruit to the environment, I hardly think that pomology is being overdone, nor that its possibilities have been always intelligently appreciated.

In the development of a fruit growing section we hear much of big profits; the promoters shout it from the house-tops; the commercial bodies sing it to various accompaniments of blare of trumpets and sounding of cymbals; the floating literature of the day dilates on it, and even the children lisp it to their fellows. But what of the losses—the failures where nature has been wrongly contacted? I know it is the unwritten law that these be consigned to the records of the past; that to dig them out of their abysmal depths is not only hazardous, but subject to inspection and quarantine, if not destruction. Nevertheless, these experiences are danger signals along the highways of pomology, and as such have a compensating value. You all know of them; no state is immune. In California there are several where orchard planting was promoted twenty or more years ago, and literally, hundreds of thousands of trees were planted under adverse conditions, where today there is

probably not two per cent of permanent commercial tree growth to tell the story of human endeavor misapplied. Again, a fruit is often misplaced in certain localities, but finally finds its equation, and so becomes a recognized factor in the horticultural resources of a State. In California this is measurably true of the olive and almond.

Our lines of thought lead to two conclusions, viz., successful fruit culture demands, first, proper environment and conditions, and second, that man's contact with nature's workshop be in sympathy with her moods and requirements. Failure is a disregard of both, and results from natural as well as artificial causes. In other words, man disturbs the balances, and then things begin to go askew, the difference between maximum success and utter failure being merely a matter of degree. To reduce the matter to mathematical dimensions is impossible for want of specific data; but in a broad way we know that this contact with the universe, if reckoned by the number of trees planted but failing of fruition, has resulted in more failures than successes. Indeed, if the opinion of the Federal Division of Pomology is to be believed, only about fifteen percent of all fruit trees sold annually ever make commercial propositions. Coming down from federal to state and locality estimates, it is the consensus of opinion of people conversant with orchard conditions in Arizona, California, Idaho, Oregon, Texas, Utah and Washington that there is a variation from ten to fifty per cent, with an average as a whole of twenty-seven per cent. Stated conversely, seventy-three per cent of the trees sold annually and planted never attain commercial importance; in the judgment of others, and applied at large, this percentage will be somewhere about eighty-five per cent. Of the total number of fruit trees of commercial plantings of bearing age, it has been said that sixty per cent are profitable in Arizona, forty-six and two-fifths in California, fifty in Texas, thirty in Utah (being the only states from which estimates have been received); of the total trees and vines coming into bearing, the percentages that will prove commercial investments are estimated at eighty in Arizona, forty-four in California, fifty-two in Idaho, twenty in Oregon, fifty in Texas, thirty in Utah, and fifty in Washington; with elimination of the unfit by reason of natural causes, such as unsuitable situations and climate, insect pests, diseases, etc., the data shows ten per cent in Arizona, thirty in California, twenty-five in Idaho, fifty in Oregon, twenty-five in Texas, thirty-five in Utah, fifty in Washington; elimination by bad management, absent ownership, ignorant methods, land put to other uses, Arizona, ten per cent, California twenty-six, Idaho twenty, Oregon thirty, Texas twenty-five, Utah thirty-five, Washington fifteen; averaging fruit production in periods of five to seven years, net percentages covering the following entire states are: Arizona ten, California eight, Texas seven and one-third, Utah ten, Washington ten; under exceptional conditions average maximum results under intensive culture are: Arizona twenty-five, California sixteen, Texas twenty-five, Utah forty and Washington forty. Wide differences in these averages must be attributed to personal experiences and limited sources and areas covered, to varying condition on which they are based, and to individual opinion. As such

they are given for what they may be worth as imperfect orchard trial balance sheets. When to the original price of the trees at the nursery is added the cost of preparing the orchard land, the planting of the trees, and the maintenance to bearing age, the failures in attaining commercial importance form indeed a shrinkage of values of no mean proportion, which leads to the conviction that commercial fruit production will not be overdone tomorrow, nor the day after, while its possibilities, either from the view-point of the plant breeder, the advanced grower, or the man in the market place, is full of the promise of better things as the contact with our physical environment grows in intelligence and in intensity.

The meagre figures presented are in no sense adequate on which to base judgment; nevertheless, they indicate a trend, and that is: (1) Nature will not tolerate a misplacement of her children beyond certain limits; and while it is true that we grow the fruits of the tropics on the fringe of the temperate zone, it is also true that Jack Frost and other negative elements harass the rear guard of even the most advanced horticultural army, consequently, we cannot go beyond certain conditions; and (2) in addition, the law of change is always at work making tree culture on certain lands and under new economic influences less profitable than other uses, rendering negligent care inevitable. By these two processes not less than from sixty-five to seventy-five per cent of fruit trees planted out annually ever reach profitable bearing. In the light of these facts, it is unreasonable to assume that orchard planting producing A 1 quality fruit, properly packed, shipped and marked will ever be overdone. Can it even be admitted that its possibilities have been more than touched? Statistics will tell you that from eighty to ninety per cent of industrial and mercantile business represents failures, if not in the sense of the board of trade, at least in the sense of the non-dividend proposition—failures as paying investments. Is pomology in the same category? The person attached to the land is at least anchored, and if he will intelligently contact his possession, success is reasonably sure.

Carlyle somewhere has said, "Blessed is the man who has found his work, and does it well," and Emerson says, "Do that which is assigned you, and you cannot hope too much or dare too much. There is at this moment for you an utterance brave and grand as that of the colossal chisel of Phidias, or the trowel of the Egyptians, or the pen of Moses or Dante, but different from all these." And in the case of a nurserymen's convention, let the "different from all these" be the growing of better trees and better varieties in the nursery rows; and in orchard and field let it be better bearing trees, better care, better quality, better methods of harvesting, shipping and marketing, a more intelligent contact, not only with the soil and climate, but with the market place, and there will open to you new avenues for exploitation, full of the promise of the possibilities of the future—possibilities which in our present stage of development are largely a closed book. Viewed from this standpoint, and in an optimistic spirit, I throw the ball back to you, "Orchard Planting: Its possibilities and when will it be overdone?" with the hope that you will catch it, contact

it intelligently, explore its hidden possibilities, and thereby blaze the way for an enlightened horticultural practice in Western America the like of which the world has not yet seen.

ANSWERS TO CORRESPONDENTS

R. C. McN.—*Dionaea muscipula*, Venus's Fly Trap, according to the botanists is confined to the sandy savannas of eastern North Carolina.

It is a very interesting little plant often found in private and botanical collections but we do not know of any one that grows it commercially. Maybe if you wrote J. Van Lindley Nursery Co., Pomona, N. C., or Biltmore Nurseries, Biltmore, N. C., they could tell you how the plant could be secured. If you secure them pot them in chopped sphagnum, peat and sand and keep them fairly moist.

A. H. A.—We presume the roses are field grown and you wish to dig them in the fall and store them.

The best plan would be to build a temporary frame six feet wide and as long as necessary to accommodate your stock. See that it is placed in a sheltered, well drained position. Unless the soil is of a very light, free nature put in about 12 inches of sand to heel them in. See that the sand is well packed around the roots so they will not dry out. This is especially necessary if tied in bundles. Protection to the tops may be given by a covering of loose material such as straw or corn fodder. If you have severe or excessive wet weather boards or sash may be used, as an additional protection.

The essentials are to keep the roots well covered and avoid too much moisture while in a dormant condition.

PROTECTING A WATER PIPE FROM THE FROST

We have on our nursery a water tank holding about 15,000 gallons. This tank is 12 feet from the ground. A two inch pipe runs from the bottom of the tank to the ground. The remainder of the supply pipe is under ground and safe from frost. We have tried several methods to prevent this pipe from freezing but without success.

Can you suggest a method of covering this pipe that will enable us to have an uninterrupted supply of water throughout the winter?
J. V.

The pipe should be walled in so as to form an air chamber around it. This may be accomplished by casing it in, leaving a three inch air space around the pipe. Then build an outer casing with an eight inch space between the two. Pack the space between the two casings with sawdust. This, if it is well made and perfectly air-tight, should be frost proof. Of course it will be necessary to carry the casing into the ground below frostline.

The essential point is to form a chamber of dead air around the pipe which acts as a non-conductor. It is the same principle used with the thermos bottle. To prevent the outer casing being warped or affected by the weather, it will be well to cover it with tar paper and weather board it.

The weakest place will be at the point where the casings connect with the bottom of the tank, so extra care should be taken to make a close fit. As an added precaution cover the pipe with asbestos.

PRODUCTION OF PEARS IN THE UNITED STATES

Thirteenth Census Statistics for Geographic Division and States, 1910 and 1900

DECREASE IN NUMBER OF TREES OF BEARING AGE

At the census of 1909, taken as of June 1, there were reported 17,716,000 pear trees of bearing age, as against 15,172,000 trees in 1910 (census taken as of April 15) a decrease of 2,544,000 trees, or 16.8 per cent. In 1910 there were 1,276,366 farms reporting the growing of pear trees, or 20.1 per cent of the total number of farms in the United States. The average number of trees per farm reporting is given as 12. No report was received in 1900 showing the number of farms reporting.

The returns of the 1900 census, likewise, did not secure the number of trees under bearing age. In 1910, however, 611,788 farms (or 9.6 per cent of the total), had 8,804,000 trees not of bearing age, or an average of 14 per farm.

The present census shows that in 1909 there were produced in the United States 8,841,000 bushels of pears, having a total value of \$7,911,000. The production at that time was somewhat greater than it was ten years previously when 6,625,000 bushels were gathered. The reports of the 1900 census give no information as to the value of pears.

NUMBER OF PEAR TREES AND PRODUCTION, BY DIVISIONS

Of the nine main geographical divisions into which the census divides the country, the middle Atlantic division in 1910 and 1900 reported the largest number of trees of bearing age, 3,670,000 and 3,925,000, respectively. A total of 2,185,000 bushels of pears were gathered in both 1909 and 1899. The value of the crop in 1909 was \$2,029,000.

The division ranking next in the number of trees of bearing age is the East North Central. In 1910 this division had 3,560,000 trees of bearing age, against 3,799,000 trees in 1900. At the present census 1,623,000 bushels of pears were produced by this division, valued at \$1,332,000. Ten years ago the production amounted to 784,000 bushels.

The South Atlantic division, with 2,326,000 trees of bearing age, is third in rank. In 1900 the corresponding number of trees was 2,292,000, a slight gain thus being shown. The trees of bearing age in 1909 produced 975,000 bushels, valued at \$680,000; but in 1899 there were gathered only 744,000 bushels, the increase during the ten years being 231,000 bushels.

The Pacific division also reports a relatively large number of trees of bearing age and shows more pears produced than any of the other divisions. In 1910 there were 1,975,000 producing trees, as compared with 3,198,000 in 1900, the decrease amounting to 1,223,000 trees. The number of bushels gathered in 1909 was 2,614,000 valued at \$2,357,000. In 1899 the trees in this division produced 2,103,000 bushels.

These four divisions reported 76.0 per cent of the total product for 1909.

NUMBER OF PEAR TREES AND PRODUCTION, BY STATES

Among the several states, New York, California, and Michigan, together contained in 1910 over 30 per cent of all pear trees of bearing age in the United States.

The number of such trees in New York at the census of 1910 was 2,142,000, this being a decrease during the ten years of 42,000 trees. The production of pears in 1909 amounted to 1,343,000 bushels, while in 1900 it was only 960,000 bushels, a gain of 383,000 bushels. The value of the 1910 crop was \$1,418,000.

California reported 1,411,000 trees of bearing age in 1910, against 2,513,000 trees in 1900. This state alone produced more pears in 1909 than the entire East North Central division, 1,928,000 bushels, valued at \$1,661,000. In 1899 a crop of 1,913,000 bushels was gathered.

In 1910, there were 1,136,000 trees of bearing age in the state of Michigan, while in 1900 the number was 1,187,000 trees. A total of

666,000 bushels of pears were produced in 1909, against 171,000 bushels in 1899, an increase of over 495,000 bushels. The value of the 1909 crop was \$536,000.

GREAT EXHIBITION OF ROSES AT BOSKOOP, 1913

In the month of July, 1913, a great exhibition of roses will take place at Boskoop by the well-known society, "Bursary of trees and plants."

This society can count on the support of nearly all the inhabitants of Boskoop, since the great exhibition of flowers in 1911 had such an enormous success; although it had been brought about by only 50 partners.

Mr. Y. H. van Nes, then president of the exhibition will, now supported by the best forces of the village, accept the presidency, which guarantees a success.

To give an idea of the sight the exhibition will afford, we mention in connection with the one department, "Roses in pots," the fact that already more than 30,000 pots have been entered.

PERSONALS

Dame Fortune still continues to smile on George Achelis of the Morris Nursery Co., West Chester, Pa. According to the *New York Tribune* his brother's estate is much larger than at first thought, as assets of over a million and a quarter have been discovered in Germany. After certain bequests have been satisfied there will be a residue of \$3,093,312.99 to be divided between six brothers and sisters of whom George Achelis is one.

It would take a long time to make that amount in the nursery business.

W. P. Stark is spending August at North Manitou Island, Mich., and is very enthusiastic about that locality. He reports it as one of the most delightful resting spots of the lake regions. The bass fishing ideal, the fruit growers' paradise, where the sweet cherries excel those of the Far West.

Mr. Stark prophesies a great future for the orchards at Thompsonville, Michigan. To use his own words—"There is a great awakening, a greater future, and with such economical advantages, how could it be otherwise where play and profit are combined?"

SEED NOTES

Apples and Myrobalan plum are reported scarce in France, so it seems that a shortage in these seeds may be looked for.

Just as we are going to press we are in receipt of the Proceedings of the Thirty-Seventh Annual Convention of the American Association of Nurserymen, held at Boston, Mass., June 12th, 13th and 14th, 1912. Secretary John Hall, as usual was very prompt,—and deserves a great deal of credit. The book is brimfull of everything that is interesting which took place at the Convention. Mention is also made of the different valued members of the Association who were removed from the ranks during the past year.

IDAHO ORCHARDING

The Industry and Its Prospects as Seen by E. F. Stephens

Mr. E. F. Stephens writes us interestingly regarding his orchard enterprises, those which he has recently undertaken in Idaho, and those in Nebraska already established for some years, in which he still has an interest. In Nebraska, part of his work was in planting partnership orchards, the expense and profits of which he shared for a term of years. Of these Mr. Stephens now has twelve, which will bear some fruit this season.

Three hundred eighty-five acres of orchard in Nampa, Idaho, is the story of but some five years' residence. The system of cultivating after a rain to prevent the formation of a crust is carried out faithfully in these areas, for Mr. Stephens, writing June 18, said he had cultivated the orchard both ways fourteen times this season. He uses the Acme pulverizer and Baker's Tower cultivator. One result of this treatment is that he is not able to find a bushel of weeds in the whole extent of the orchard.

The Trustee Company of Idaho has purchased nearly a third of these orchards. This company counts among its members several practical horticulturists, and a large number of business men of sound judgment.

Mr. Stephens, in writing for *The Idaho Statesman*, emphasizes the importance of planting in any section of the country varieties which are adapted to that section. Figures of actual production show that Jonathan and Rome Beauty produced nearly twenty boxes of commercially packed apples per tree, while in the same orchard Oregon Red, Ben Davis, Delaware Red and Arkansas Black ranged from ten and one-half to thirteen and one-half boxes.

FRUIT AND INSPECTION IN IDAHO

That horticultural inspection is being carried on in Idaho is witnessed by the fact that some arrests have been made this summer as a result of non-compliance with the spraying laws. Idaho has large orchard plantings, being fourth among the northwestern states in acreage planted, and her officials mean to keep pace with some of the other sections of the Far West which are noted for the perfection of the fruit shipped. It was estimated by an eastern buyer that Idaho's yield of apples the present year would be two thousand cars.

F. W. MENERAY NURSERY CO.

Charles W. McDonald, Omaha, has been appointed receiver for the F. W. Meneray Nursery Co., Council Bluffs, Iowa. The First National Bank of that city was responsible for the appointment, claiming they hold more than \$50,000 in notes against the company, which are secured by chattel mortgages on the nursery stock and machinery, also mortgages on the real estate owned by the corporation.

Plans for the future operation of the business have not as yet been completed, according to members of the nursery company who were interviewed Tuesday. It is the hope of the owners of the business, however, to pay off the heavy indebtedness within a few months, and again assume charge of the business.

A. C. Meneray ascribes the present straightened condition of the company's resources to poor seasons which have been the rule for the past three years. Three years ago, Mr. Meneray explained, late frosts caused the company heavy losses, and the following summer and again last summer these losses were increased by drouths.

"This year our stock is in fine condition," he continued, "and I see no reason why we should not pay out as soon as it can be marketed. A large portion of our nursery stock has not matured, but with any kind of an even break it will yield as a goodly profit when it is sold."—*The Nonpareil*, Council Bluffs.

Business Movements

INCORPORATED

CLINTON, IOWA.—J. R. Bather Co., florists, nursery and seedsmen, capital stock, \$15,000.—*Horticulture*.

WILMINGTON, DEL.—St. Andrews Bay Nursery & Orchard Co., capital stock, \$250,000. Incorporators, William J. Malone, Herbert E. Latter and E. E. McShinney.—*Horticulture*.

The Fish Nursery Co., of Worcester, Mass., recently purchased the farm of J. Fred Searle, at Auburn, Mass. George Morton, manager of the nursery, will reside at the Auburn place.

GEORGE S. JOSSELYN'S NURSERY STILL TO CONTINUE

The nursery stock consisting of grape vines, gooseberries and currants, together with all the real estate and root cellars of the late George S. Josselyn, has been sold to Fredonia parties and will be hereafter known as The Josselyn Nursery Company. The management is in the hands of capable men having over thirty years' experience growing grape vines. The same office help and heads in other departments who have been so long with the business have been retained by the Company.

Mr. J. B. Pilkington, Portland, Oregon, vice-president of the American Association of Nurserymen, has just returned from Europe, where he has been visiting the nursery centers of Holland and other European countries. On his way home he stopped off at Rochester and Dansville, visiting the nurseries at those points.

Samuel Newman Baxter, for eleven years in the employ of Thomas Meehan Sons, has accepted a position with the Fairmount Commission of Philadelphia.

See the *New York Packer*, August 3, for estimates of the apple crop the country over.

"Enclosed find a dollar for another year's subscription to the NATIONAL NURSERYMAN. I don't want to do without it. It is an excellent paper."
Ohio.

W. A. ELLINGER.

Robert Pyle, president and treasurer of the Conard & Jones Company, West Grove, Pa., called at the office of the NATIONAL NURSERYMAN and on Rochester nurserymen the last week of August.

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.
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LEGISLATION WEST OF MISSISSIPPI RIVER—Peter Youngers, Geneva, Nebr.
CO-OPERATION WITH ENTOMOLOGISTS—L. A. Berckmans, Augusta, Ga.
PROGRAM—Samuel Miller, Milton, Oregon.
EXHIBITS—
ARRANGEMENTS—John Hall, Rochester, N. Y.; J. B. Pilkington, Portland, Ore.
PUBLICITY AND TRADE OPPORTUNITIES—W. P. Stark, Louisiana, Mo.; Jefferson Thomas, Harrisburg, Pa.; Orlando Harrison, Berlin, Md. C. M. Griffing, Jacksonville, Fla.; G. C. Roeding, Fresno, Cal.; H. D. Simpson, Vincennes, Ind.; James M. Irvine, St. Joseph, Mo.
MEMBERSHIP—James McHutchinson, New York City.
CONSERVATION—John Craig, Ithaca, N. Y.

STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia. secretary, Thomas B. Meehan, Dreshertown, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.
Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.
Connecticut Nurserymen's Association—President, W. W. McCartney, New Haven, Conn.; Secretary, F. L. Thomas, Manchester, Conn.
Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
National Nurserymen's Association of Ohio—President, J. W. McNary, Dayton O.; secretary, W. B. Cole, Painesville, O.
Pacific Coast Association of Nurserymen —President, P. A. Dix, Roy, Utah; secretary-treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.
Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary, Earl Peters, Mt. Holy Springs, Pa.
Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.
Tennessee Nurserymen's Association—President, E. W. Chattin, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.
Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

A SERIOUS DECREASE IN BEARING FRUIT TREES

Figures regarding the production of apples, obtained in the preparation of the thirteenth census, are interesting and perhaps a little surprising, in that they show a decrease of 54,471,000 apple trees, or 33.4 per cent from 1900 to 1910. The value of apples produced in 1910 was \$83,231,000, the number of bushels being 147,522,000, a large decrease since 1900. Of the nine main geographical divisions of the United States, the east north central division reported the largest number of trees of bearing age. Our great apple states are Missouri, New York, and Illinois; for in 1910 they contained nearly one-quarter of all the apple trees of bearing age in the country. A decrease of 16.8 per cent in the number of pear trees of bearing age is chronicled. Of about fifteen million trees in bearing in 1910, 1,411,000 were claimed by California. In spite of the fact that the number of trees in bearing was much smaller, 2,216,000 more bushels of pears were produced in 1909 than in 1899, or 33.4 per cent.

STONE AND OTHER FRUITS FROM SEED

It is often said rather carelessly that such and such a variety of fruit comes true from seed. We have yet to see the variety which will reproduce with satisfactory certainty. The statement is frequently applied to peach, and sometimes to plum and cherry trees. There is no doubt that some of the old strains of plums, as, for instance, the Damsons, which represent one of our oldest groups of cultivated European plum, will reproduce with reasonable exactness, but no one can say that it will come true; for there is sure to be variation in character of tree, in quality, size, and season of fruit. It is certainly a good thing to encourage, namely, the growing of fruit from seed. We have in these later days, when the production of fruit by budding and grafting has developed, as it were, into a type of manufacture, lost sight of the older fashioned methods of growing our fruits. If the pioneers of this country had not planted seeds brought by them from the older lands, we would certainly be without many of the valuable varieties which we now possess. Work in this direction, that is, through seedling production, has come more or less to a standstill, except such lines of scientific effort as are being prosecuted by experiment stations and other institutions of that kind.

Our point is that, though the grower may not expect to reproduce with exactness the variety which he plants the seed of, this should not deter him; for he has all the speculative possibility of securing something better than that which he planted, and in this way improving that particular race of fruit. It is an old and worthy maxim which says, "Plant the seeds of the best and largest fruits, and hope for something which will be a distinct improvement over the parent."

THE QUESTION OF HARDINESS

This is certainly a relative question. It is dependent largely upon the factor of climatic environment, and in discussing whether plants are hardy or tender in a given locality, one must keep the factor of environment constantly in mind. Otherwise, such

vagaries and inconsistencies of behavior are to be noted as would appear entirely unexplainable. Hardiness is inherently perfect adaptation of a plant to its surroundings. A plant may be satisfactorily hardy in a region where a temperature of minus 20° is frequently registered, while it may winterkill in another locality where the temperature does not fall below zero. For example, our attention has recently been called to the fact that American white ash, Carolina poplar, and the vigorous Norway maple suffered from winter-killing on Nantucket Island, where the minimum temperature fell little if any below zero during the past winter. Yet these trees lost a considerable proportion of their terminal shoots. An examination showed this loss to be due to the imperfect ripening of the wood in the autumn. Now, this imperfect ripening was in turn to be charged to the peculiarities of the season. The long, warm, and relatively moist autumn encouraged late growth, and the imperfect storing of the buds and wood tissue with reserve food material.

It has long been noted that some of the hardy New England trees and shrubs, when transplanted to the British Isles, winterkill in the relatively moist and mild climate of England. For the opposite reason, many English plants fail when brought to this country, for the reason that they are products of a long growing season, and that when brought to this region they continue growing until stopped by frost. The result is the same, namely, in the production when winter comes round of imperfectly ripened wood or in other words imperfectly stored cell tissue.

It is worthy of note also that some plants possess that character which we recognize as determinate growers. In other words, they have a definite period of growth and ripen up their wood at the end of that period, and are uninfluenced by conditions favorable to growth or otherwise which may follow this season. An excellent example of this is found in the box elder of the American Northwest. It grows with great rapidity during the early part of the season, ceases growth early, forms its terminal buds, drops its leaves, and prepares for winter at an exceptionally early period. The Duchess apple, the product of a region of short summer heat, is another example of the same type. The gooseberry and currant, cold-blooded plants from the North, also furnish examples which illustrate this point. These plants then are the products of definite climatic conditions, and are developed by a long process of natural selection. The whole question then, or at least a large portion of this question of hardiness, comes back to the principle originally announced, namely, that of adaptation.

NURSERIES OF NEW YORK STATE

"There are 675 tree nurseries in New York State, according to the figures in the state agricultural department.

"These nurseries embrace 11,554 acres of land, and contain approximately 14,000,000 apple trees, 6,700,000 pear trees, 1,100,000 dwarf pear trees, 8,600,000 plum trees, 10,700,000 cherry trees, 1,500,000 quince trees, 1,167,000 apricot trees, 5,100,000 ornamental trees, 13,000,000 ornamental shrubs, 6,900,000 currant bushes, 15,580,000 grape vines, 122,000 herbaceous plants and 2,116,000 gooseberry plants."

NURSERY PRODUCTS OF THE UNITED STATES

The total value of nursery products reported from 5582 establishments in 1909 was \$21,051,000; an increase of 591 establishments, or 11.8 per cent, and \$10,927,000, or 107.9 per cent, in ten years. In 1909 the Middle Atlantic division ranked first with products valued at \$4,355,000, as compared with \$2,523,000 in 1899, an increase of \$1,832,000, or 72.6 per cent, during the decade 1899-1909. Although the number of establishments reporting nursery products, 1159, was greatest in the East North Central division, the latter ranked fourth, being exceeded in value of products by the Middle Atlantic, West North Central and Pacific divisions. In per cent of increase, the Pacific division ranked first with 377 per cent, the West South Central division second, 179.4 per cent, and the South Atlantic division third, 117.4 per cent.

COMPARISON OF FLORIST AND NURSERY PRODUCTS

In both the florist and nursery industries, an increase was shown in the number of establishments and value of products for each geographic division. In both 1909 and 1899 the value of nursery products was greater than that of florist products in the West North Central, East and West South Central and Pacific divisions. This difference was particularly marked in the West North Central and Pacific divisions in 1909. Although the number of establishments reporting florist products was greater than those reporting nursery products in the East South Central division, the value of products in this division was greater than the value of florist products. The very much greater value of florist products in the country as a whole was contributed almost entirely by the New England, Middle Atlantic, and East North Central divisions. However, the value reported from the West North Central and Pacific divisions was over \$2,000,000.

VALUE OF PRODUCTS BY STATES

In 1909 New York ranked first with a total value of products of \$5,149,000; Pennsylvania was next with \$3,803,000, and Illinois third with \$3,695,000. In 1899 the order was the same, except New Jersey was third. However, in 1899 the value of products for these three states amounted to but little more than half that of 1909. Increases are shown in every state, except the District of Columbia, where in 1899 government institutions were included in the census reports while in 1909 they were not enumerated.

The three ranking states in value of nursery products in 1909 were New York \$2,751,000, California \$2,213,000, and Texas \$1,253,000. The standing in 1899 was New York, Iowa and Illinois. An increase in the value of nursery products was reported from every state, except Maine, Vermont, Virginia, South Carolina, and the District of Columbia. The gains in all three states of the Pacific division were especially remarkable, more particularly in Washington, where the value in 1909 was almost twenty times as great as that of 1899.

Be sure to put the date of your catalogue in a prominent place. Oftentimes it will save a lot of time and trouble.

DEATH OF JOHN CRAIG

It is with deep regret we have to report the death of our editor, Professor John Craig, who passed away on Saturday, August 10th.

In 1908, having held the position of Professor in Cornell for seven years, Professor Craig had his half-year's leave of absence. Leaving in February, he spent this time in travel and study in Europe. He had been in rather poor health for some time previous, and soon after reaching Europe underwent an operation in Switzerland. He was temporarily considerably benefitted by this. His family accompanied him on the European trip. While there he met many well known nurserymen and horticulturists. For the past six years (with the exception of the year when he was abroad) he had spent part of each summer at Siasconset, Nantucket Island, Mass., where he was this summer occupying with his family a new summer cottage.

He leaves one son who is nearly ready to enter Cornell, a step-daughter who lived at home, two step-sons in Canada and three sisters. His only brother died late in 1910, and his mother, more than eighty years old, passed away in December, 1911, when Professor Craig was not able to be with her or attend the funeral.

As a member of student organizations, he was a beloved elder brother, always interested in the doings of his young associates, always welcome at their gatherings.

Through many months of more or less constant suffering, he was, as was remarked by his friends, the pluckiest man they had ever known. He was always thinking of something he might do which would make other people happier. Hopeful to the very last day, optimistic in the midst of his terrible suffering, he frequently mentioned things he wished to do some day, and work which he intended to accomplish.

Mrs. Craig's poor health for several years past caused him great anxiety.

Burial will take place next spring at his old home at Abbotsford, Quebec.

The following is an extract from "Who's Who in America," 1912-13: Craig, John, horticulturist; b. at Lakefield, P. Q., Apr. 27, 1864; s. William and Mary (Hamilton) C.; Iowa State College, 1885-8, received degree B.S. from Iowa St. Coll.; asst. Ia. Expt. Sta., 1888-9; horticulturist Dominion Expt. Sta., Ottawa, Can., 1890-7; M.S. in Agr., Cornell, 1899; m. Florence Augusta (Slater) Currier, of Ottawa, Can., Nov. 1895. Prof. horticulture and forestry, Ia. State Coll.,

1899-1900; prof. extension teaching, Cornell, 1900-3; Prof. Horticulture, Cornell, 1903-12; Editor THE NATIONAL NURSERYMAN, 1904-1912; pres. North Fla. Pecan Co., S. Ga. Pecan Co., Empire-Georgia Pecan Co. Mem. Jury of Awards, Chicago Expn., 1893, St. Louis Expn., 1904, Nat. Apple Show, Spokane, 1908. Fellow Royal Hort. Soc., A. A. A. S.; Sec. Am. Pomological Society 1903-1912. Mem. Am. Civic League (advisory bd.), Alpha Zeta of Cornell (hon.). Mason (32°). Clubs: Town and Gown, Zodiac, Acacia, Cosmopolitan (trustee). Author: Practical Agriculture (James), revised ed., 1901. Contributor to Cyclopedia of American Horticulture.



JOHN CRAIG

IN MEMORIAM

The members of the New York State Fruit Growers' Association have learned with the deepest regret of the death of John Craig, Professor of Horticulture at the New York State College of Agriculture at Cornell University. In the death of Professor Craig, the fruit-growers of New York, as well as Cornell University, have lost an inspiring teacher, a thorough and accurate investigator and valued friend.

The following members of the Society were appointed to put on record and to express to Mrs. Craig and the other members of the family, in behalf of the members of the Association, an appreciation of his life and services, and their sympathy in this hour of bereavement.

Signed,
C. S. WILSON,
S. D. WADHAMS,
EDW. VAN ALSTYNE,
Committee.

I wish to express the loss which has come to the horticultural world, and to me personally, in the death of Professor Craig. It has been my privilege to know Professor Craig since I was a boy, first as a teacher, and later as a close friend and associate in teaching and research. His influence left a profound impression upon my life.

The students loved him as a teacher; he sought to know each personally, often inviting them to his home. Thus, he adapted himself to the individual needs of each. Hundreds of students throughout the world mourn the loss of their teacher and friend.

As an investigator, he was accurate and thorough; he approached every problem with an open mind unbiased by any opinion previously formed. As a scientist, he searched

for the truth, and for this from every point of view. His publications will ever remain as a monument to his memory.
Ithaca, N. Y. C. S. WILSON.

NORTH MANITOU ISLAND, MICH., August 22, 1912.
NATIONAL NURSERYMAN,
Rochester, N. Y.

My Dear Yates:

I am profoundly shocked to learn of the passing on of our mutual friend and your editor, Professor John Craig. I feel that a great man has fallen.

For some weeks I have been here on the island with my family, out of the world, so to speak, and yet in the fruit grower's paradise, so that I have not been in touch with the current news. Yesterday afternoon Professor Hedrick, of the Experiment Station, Geneva, N. Y., was here with Mr. Dow and Mr. Merritt, prominent Michigan orchardists, and he told me the sad news.

Prof. John Craig was truly the nurseryman's friend, one of Nature's noblemen. His work, his thought was for the uplift to the higher plane; a practical man of science who was not only doing a splendid work in the training and developing of young men at Cornell, but his work reached out into the nursery and the orchard world. Who will take his place? One by one our nursery fraternity has been losing not only pioneers but landmarks and men who were blazing the way, leading on. His work will live after him. I realized in my talk with Professor Craig at Boston that he was doomed. The fatal malady had seized him in its death grip, and yet I could not realize that the end was so near. The nurserymen, the pomologists and the scientific men, everyone of whom knew him, deeply sympathize with his family, friends and the institutions he represented so ably.

For many years I enjoyed the acquaintance of Professor Craig. I appreciated what he was doing for pomology in general, and then I felt all the closer as he was one of the professors at Cornell of my son, William H. Stark, and only recently William had several letters from Professor Craig, who was keeping in touch with his work and the William Stark Nursery Company, showing a deep interest in the practical working out of problems they had worked over together in the class room. It was that friendly interest, the follow-up, which kept him young and buoyant and made him the friend of the young men. He traveled generously, keeping in close personal touch with the progress and development of all that was horticultural, and his knowledge was the wisdom of ages. His character was that of the conservative, progressive, honest, sincere and great in his simplicity.

I think it was about one year ago that Professor Craig visited the Girard grape plant which William located, and he discussed the location and soil on a scientific basis. His exhaustive analysis was not only interesting but deeply valued by me as it proved the judgment and wisdom of my son in making the selection of what Professor Craig and I considered from the two viewpoints, science and practical experience, as the ideal grape nursery soil and location.

I am

Yours sincerely,

W. P. STARK.

Professor John Craig was a prince socially. In his chosen life work his success was notable and his reputation more than national. The relations of the writer with John Craig, however, were largely that of a business associate.

He was the pioneer among horticulturists of national repute in seeing the great promise of the Paper Shell Pecan. Under his guiding hand and watchful eye the largest and most promising Paper Shell Pecan groves in the world were established in southwest Georgia and Northern Florida.

Aside from his duties as a teacher, this was his hobby; he devoted to it his time and energies and store of knowledge and experience for the past five years, and that he was not permitted to live to see the full development and fruition of this latest and most promising field of nut-culture is the profound regret of all his business associates. Had his life been devoted to business enterprises, he doubtless would have made an eminent success.

He possessed a large measure of business sense. In business he was keen and absolutely "on the square."

It has been a privilege to be associated with him, and his business associates feel his taking off as a distinct personal as well as business loss.

Chicago, Ill.

J. M. PATTERSON.

I knew Professor John Craig personally and intimately during the past fifteen years, and now feel deeply shocked and grieved at the loss of a fine, true friend. His dominant qualities seemed to me to be vigor of mind and body, alertness, great determination and tenacity of will, and unusual social powers. He was a most active and aggressive propagandist of improved horticulture in Canada, Iowa, New York, and the country at large, at a time when such a forceful personality was worth the most.

Amherst, Mass.

FRANK A. WAUGH.

The death of Professor Craig comes to me as a great personal loss as he was more than a business associate. When a close friend and co-worker is suddenly taken away by death, it makes us all realize how frail is the tenure of the things of this life and how trifling are the things we fume, fret and worry about. Professor Craig was one of those natures who seemed to realize this to the fullest extent, and through our eight years of association there was never a word of discontent, for he was always kindly, courteous and obliging, with heart and soul in his work.

I know that all the nurserymen and friends with myself sincerely regret his death and feel we have lost a true friend and worker in Horticulture. Our heartfelt sympathy goes out to his bereaved wife and family.

Rochester, N. Y.

C. L. YATES,
Business Manager.

It was my great privilege during periods covering about five years altogether to work with Professor Craig as his stenographer. It was indeed a privilege, as those who knew Professor Craig can readily understand. His un-failing good humor, his thought for others, his habit of accepting conditions as they were and seeing the amusing side of a situation, instead of taking some one to task regard-

ing it—these were some of the traits which made him beloved of all who came in contact with him. His cheerfulness in the midst of intense suffering was a marvel to all, and his hopefulness under the most disheartening circumstances was many times said to have been a large factor in pulling him through the crises of the past winter. To have worked day after day with Professor Craig is an experience to remember with pleasure all my life.

Ithaca, N. Y.

HELEN E. BLAKE.

The death of Professor John Craig is keenly felt by the staff of the NATIONAL NURSERYMAN by whom he was much loved and respected. The grit and courage that enabled him to attend to his manifold duties while suffering intensely as he did for the last year or more, from an insidious disease, was an inspiration to all who knew him.

It is of such material heroes are made.

To the last moment he was thinking and working for our journal and incidentally the welfare of nurserymen. God has called him and we must continue the work he so ably conducted.

It is not an easy matter to readily fill up the gap made by his death but we can best revere his memory by putting double energy and interest in the NATIONAL NURSERYMAN whose welfare he had so much at heart.

THE NATIONAL NURSERYMAN,
Rochester, N. Y.

Gentlemen:

Professor Craig and I have been closely associated for years and his death is like a personal loss. He was a man of strong friendships and personal graces, and will be much missed. He was cut off in the prime of life after a most heroic struggle against great physical odds. In serious ill health extending over a number of years, during which time he had been a great sufferer, he maintained the most hopeful determination to overcome and to carry his work.

Professor Craig was the head of the Department of Horticulture in Cornell University. For the past few years he had given his attention particularly to the floricultural and vegetable-gardening interests, although closely maintaining his touch with general pomological affairs. It was his ambition to develop high-class teaching and experimental work in the new college fields of floriculture and vegetable-gardening, and his department had begun to assume importance in these directions. The College of Agriculture, through his work, became the official testing-ground of the American Peony Society, the Sweet Pea Society, and the Gladiolus Society. A farm has recently been purchased on which it was expected to develop these and other horticultural interests. He was full of plans for the extension of his work. The plans that he had for his department, however, I hope will be carried out in their essential features.

Professor Craig had travelled extensively in this country and had a very wide circle of acquaintanceship. He was in much demand for meetings in all parts of the country. In later years he had become interested in the pecan business in the South and in his college work he gave particular

attention to the teaching of nut-culture. The Robert T. Morris collection of nuts in his department is one of the best in the country.

Professor Craig had a very personal interest with his students, and his social qualities added to the warmth of his friendship. His residence was freely open to entertain guests.

Yours very truly,

L. H. BAILEY.

Ithaca, N. Y.

SUDDEN DEATH OF CHARLES L. YATES

Just as we go to press a telegram advises us of the death of Charles L. Yates, secretary-treasurer and business manager of the NATIONAL NURSERYMAN. All who knew Mr. Yates will be much shocked to hear of his sudden death after two days illness of acute indigestion. He died at his home at nine o'clock, Wednesday evening, September 4th. He was sixty-five years old and is survived by a widow and an adopted son. So closely identified with nursery interests, Mr. Yates will be much missed; his large-hearted cheerful, lovable nature won him many friends to whom his death will be a personal grief. A full account will be given in our October issue.

AN ATTRACTIVE ORNAMENTAL

We owe a good deal in this country to Japan for furnishing us with a large number of desirable ornamental trees and shrubs. Some years ago, nurserymen talked a good deal about the desirable qualities of *Eleagnus longipes*. This shrub grades in hardness with the peach, that is to say, it would probably not be safe to plant it in regions where the peach does not succeed. But for this zone it possesses distinct and well marked values. The foliage in itself is peculiarly attractive. The green tint which characterizes the upper surface stands out in pleasing contrast to the silvery shade which marks the under leaf. Then, when the plant is in fruit, its oblong scarlet drupes, small plum-like fruits, are exceedingly attractive, and hang on well into the autumn. However, it is probable that, in most cases, it will not be allowed to do this; for the fruit has considerable culinary value, making an excellent brand of jelly, and also being very much appreciated by the birds. The shrub is a low growing plant and suitable for border planting.

Correspondence

Editor NATIONAL NURSERYMAN,

Dear Sir: We wish to report the loss by fire of our packing house, machinery, and tools, loss about \$1500, no insurance. This was the only building that was not insured. Origin of fire not known. Our nursery stock is doing finely this season. Crops of all kinds are extra good. Weather just now too cool for corn.

Fairmont, Minn.

ST. JOHN NURSERY CO.

THE LAW AND THE NURSERYMAN

A Californian's Point of View

LEONARD COATES, California

I realize the difficulties that lie in the way of even an approximately acceptable presentation of this subject by a nurseryman before a fruit growers' convention, although, and I am not alone by any means, any money I have ever made in the nursery business has been, and is now, invested mainly in orchards.

Herein, I would venture to say, is the crucial point affecting adversely consistent and harmonious action in legislative work assuming to be for the betterment of the fruit-growing and other horticultural interests of the State—the acceptance of the erroneous postulate, “that the interests of the fruit-grower and of the nurseryman are not mutual and are, therefore, antagonistic.”

The remarks I propose to make, then, will be more in the nature of a plea for harmony,—a realization of the fact that the two interests are one, and that either one, the nursery or the orchard, is dependent upon the other.

The whole question must be viewed and worked out dispassionately, commencing with a right conception of justice, or, in other words, a principle. “Nothing arbitrary, nothing artificial, can endure,” says Emerson in his essay on “Compensation,” and there is much more in this essay which might be pondered before laws are hastily enacted. Some may say that the transeendentalism of Emerson is far removed from the simple proposition of insect control, but you will find, I think, upon investigation, that laws often fail, or become a dead letter because conceived in error and brought forth in injustice.

Sometime ago an editorial appeared in *Saturday Evening Post* from which I clip the following paragraph:

“Constitutionally speaking, any state has an unquestioned right to be as backward as it pleases; but the strictly constitutional view of the relations between state and federal government is rapidly giving way. Not only does Congress steadily gain a wider field for direct legislation, but there is a constant demand that it help indirectly to do what it has no power to accomplish by direct act. In other words, the United States, like the industrial companies, tends more and more to consolidate.”

The enactment of laws presupposes a knowledge of conditions and facts requiring such laws, and we know only too well that in horticultural state legislation this is not so. Such laws are too often added to the Statute Book without due consideration, and prompted by sundry “resolutions” forwarded as an expression of opinion by those interested, but which opinion is apt to be prejudiced and sadly ill-considered.

It would be vastly easier to pass laws and administer them forbidding a man to have in his family or in his employ any person to “take a cold” or have a tooth ache, than to

legislate for the eradication of any insect, or any plant disease, or even for the control of the same, except in a comparative degree.

If a system of State laws on the Control of Insects or Plant Disease is ineffectual, because impossible, how much more so when counties pass ordinances which no one would pretend to say are even constitutional? With equal right may a school district or the owner of a town lot seek the enactment of laws to prohibit the entry of whatever might affect plant life adversely.

And what is it that so influences public opinion that makes the passing of such laws possible? It is, largely, the publishing of certain mathematical propositions depicting the money value in losses sustained through the depredations of insect pests and plant diseases, amounting to many hundreds of millions, if not billions of dollars annually.

But, has it ever occurred to the reader of such sensational items that the saving of all of this loss in crops would mean, so far as money is concerned, absolute ruin to the producer, and therefore, as all wealth depends upon the cash value of the productivity per acre, all others would be involved in disaster? There are not railroads or ships to carry a tenth part of such crops, and speculators would control “hold overs” for all time, so that no recovery to a normal condition would be forthcoming.

“Public opinion,” so-called, is often expressed hysteria, and resulting action generally unwarranted. Insects live upon plant life; it is no less true that birds live upon insect life. It is quite as possible to ‘eradicate’ birds as it is to ‘eradicate’ the buffalo, a deed almost consummated. Birds are killed as ‘sport (?)’, as the farmer’s enemy (?), for food, to adorn the woman of fashion, and, wantonly. It is the old story of the spigot and the bung hole, or, in other words, “penny wise and pound foolish.” In the science, so-called, of farm economics, one class of instructors will dwell upon the necessity for bird protection to save crops from destruction; another, supported by equally incontestible figures will show that predacious and parasitic insects must be relied upon to control or keep in check those upon which they naturally prey; while still another class will prove to the satisfaction of their students that the application of poisons to insect pests, either by contact, or assimilated as food, is absolutely necessary; or, what may be termed a sub-class will insist upon the method of fumigation as more effectual than any other.

These facts prove that the endeavor to control plant disease is no more scientific than is the practice of medicine upon human beings, because it is ever changing. No formula used and recommended as an insecticide twenty years ago is now used. The strong acids or alkalies included in those accepted today destroy beneficial insects as well as those

that it is sought to kill, and, therefore, one school out of the same college contradicts the other.

A person suffering from what is called heart disease is given digitalis, which in time ruins his stomach so that he can eat nothing and dies as the result of one medicine given to cure something else.

In the habits of insects, in the various treatments for their control, are there any two experts who agree? With Omar Khayam, one may well say

"Myself when young did eagerly frequent
Doctor and Saint, and heard great argument
About it and about, but evermore
Came out by the same door wherein I went."

Quarantine cannot be effective, except on the Statute Books. The law says that no package containing cuttings, plants, seeds, etc., shall be received by a postmaster until it has been inspected by a duly qualified official. To carry this out is an impossibility, so all mail order business must end. Laws of this kind are "too numerous to mention," but the wherewithal to enforce them is not forthcoming.

An evil effect of quarantine is to invite retaliation. Recently the State of Nevada issued a quarantine against cattle from California. The California State Veterinarian declared it the most unjust quarantine one state ever had placed against the other. Did Nevada remember our quarantine against her?

My friends, these inter-state, inter-county quarantine laws are productive of infinite harm which reacts and will continue to react with ever increasing volume against the originators, instigators, and participators. Quarantine to be effectual must be absolute, which is absolutely impossible. To prevent distribution of insects is as impossible as to prevent distribution of seeds.

This does not refer to the introduction of foreign or alien pests. As with the introduction of coccinelids into Imperial Valley, nature may well be assisted. If we will persist in getting fruit and trees from abroad, they may well be inspected under the most rigid laws. Their very introduction is a blundering mistake, really. We do not need oranges from Mexico any more than does the millionaire need to send to South America for plants for his conservatory, or the hotel management to import bay trees from Belgium to adorn their corridors, when we have such unlimited arboreal, floral and pomological wealth of our own.

The only real quarantine barrier is a natural or physical one. Climatic conditions are imperative, but none other. Black scale has been shipped for half a century on various trees to the neighborhood of Oroville, but none can be found there living, I believe, while hardly an olive, an orange, or an oleander near the coast can be found without this insect, although the trees are sprayed annually with the most up-to-date insecticide. Instances of the kind may be multiplied almost indefinitely.

So with the peach-borer. It inhabits the native tree growth of the Coast counties, and statistics certainly show, by crop returns, that it never has been a serious pest where most known. A careless, slovenly fruit grower will, of course, have sickly trees; but if trees are annually hoed, as they should be in any case, the presence of the borer is apparent,

and his discomfiture readily at hand. This grub has been distributed over a great part of the State for at least half a century and never has gained a foothold except in its native habitat.

I know some enthusiasts may cite cases where certain arbitrary measures may seem to have worked favorably, but I insist that we are dealing with a principle, something of much wider scope, because we are or should be, endeavoring to understand and work with the general law, which harmonizes all these apparently discordant conditions. Again, no doubt, I am accused of indulging in platitudes, or soaring into unknown realms of transcendentalism, but the history of the past cannot be pointed at with any pride or satisfaction. Why is it, may I ask, with all the supposedly expert knowledge of insects and plant disease, that both increase so rapidly?

Many years ago whole orchards were being killed by the application of strong caustic or alkaline solutions while trying to kill "San José scale" which "ruined the fruit industry" in California a quarter of a century ago. Since then mineral oils have wrought havoc and still more recently arsenic has burned the foliage from apple trees by the thousand. If the trees are not killed, certainly their constitution is weakened, and they become an easy prey to the next disease,—insect, bacterial, or fungoid. Of course, the operation is often pronounced "successful," although the patient lies dead.

About forty years ago France imported grape vines from the Mississippi Valley, and with them the phylloxera. When this was discovered some years later, the European or vinifera grapes were dying by the hundred thousand. The French Government took it up, as a most important industry seemed doomed to destruction. Experts, encouraged by the offer of shekels and fame, worked for years at the problem, but all to no avail, when the idea occurred to use these American grapes as a stock on which to graft the vinifera. This was found successful, and now certain well tested wild species, or their crosses, are used everywhere as stocks on which to graft the more tender or vinifera varieties. The phylloxera naturally lives upon the roots of the native American grapes, but does not kill them.

PROTECT THE BIRDS

I have alluded before to birds in their relation to agriculture. Comparatively little attention is given to the pamphlets issued by the U. S. Department of Agriculture proving incontestibly the usefulness—nay, the necessity for birds in order that plant life be protected. The argument is unanswerable. Human life depends upon bird life. Birds, Trees, and Man are an inter-dependent trinity, look at it any way you will. Destroy the forest, birds perish, floods succeed drouth; man starves. Why are the warnings unheeded? The agricultural press gives prominence to the silly utterances of the farmer who bewails the loss of some cherries, or grapes, or corn, or other fruit or seed. Is not the laborer worthy of his hire? But the wailings are heard and the still sillier legislatures enact laws that permit the destruction of birds. Why is the warning not heeded? Because in the same volume that gives figures

to show what part birds play in this game of living, is equal prominence given to all other methods for insect control, each one necessary or important as the other. It is useless wielding the spray pump and poisoning both pest and tree, working contrary to nature, while conservation is so little understood or practiced.

Italy and other European countries are using herculean efforts in the endeavor to save birds, but it is almost too late. In one part of Massachusetts, a state farm of five thousand acres is to be set apart solely for the purpose of bird propagation.

Because we lose fruit from a cherry tree, or grapes, or part of any other crop, we are apt to think that the destruction of the birds doing the injury will help us. It may, temporarily. But if a bird eats cherries for one week, what does he live upon for the remaining fifty-one weeks in the year? Even while he eats fruit, he is devouring cut-worms, canker-worms and a host of other grubs and insects. The farmer kills the hawk because he will, occasionally, catch a chicken; and linnets and sparrows multiply. There is no sound argument in favor of bird destruction against crop damage, for the very reason that almost all birds would, with equal justice, come under the ban.

As previously shown, the remedy is often worse than the disease; opinions among so-called experts differ most radically on almost all that pertains to the general subject of the economic cultivation of plant life. This season curl-leaf of the peach has been unusually prevalent. We sprayed twice with the same formula that in other seasons was given the credit of preventing this affection, but this year with no good resulting whatever. Crimson Rambler roses, mildewing badly every year, this year were free. The late James Shinn thirty-five years ago remarked, as a result of long experience, that this disease was dependent upon the comparative susceptibility of certain varieties to climatic influences.

You say, "Would you then have no laws?" I would have laws, but let them be founded on common sense, on justice, on principle. Horticultural law, as pertaining to the Horticultural Commission, would be better known as embodying "horticultural sanitation," and education will prove vastly more efficient than a statute book full of "Thou Shalt Nots" which cannot be enforced. Let the state law be strengthened, if need be, to compel any plant or tree grower or owner to "clean up" or pay the expenses of such work done arbitrarily. Let biological and entomological work go on under direction of the State University, with sufficient financial state aid; and, above all, encourage primarily the work carried on by Mr. Carnes and his able assistants of the State Insectary, and ever let their work be known, so that additional appropriations may be obtained when needed to aid in the discovery, introduction, propagation, and dissemination of beneficial insects.

The grand work done by the Horticultural Commission in preventing the introduction of insect pests or diseases from abroad is especially commendable; where more help is needed, it should be available. But, when it comes to a great commonwealth divided and sub-divided into other commonwealths, states, counties, districts, municipalities,

or what not, each legislating against the other, it presents a spectacle unedifying, unproductive of good, unjust, encouraging animosity and vindictiveness, inviting retaliation, and by the acknowledged illegality of many of the ordinances framed and executed, holding up the law itself to disrespect and ridicule.

I will give a few illustrations the point of which will appeal to all unprejudiced persons, and I would not be here today if I did not have abiding faith in the love of fair-play inherent in the American people.

A car-load of trees was shipped from the North to a far southern point. These trees by a county official at point of destination were declared diseased, and the shipper received much injurious advertising in consequence, besides the expense of a trip of many hundreds of miles, loss of time, etc. After further examination, it was found that a mistake had been made, and the trees were passed as healthy; the loss sustained by injury to the reputation of the firm can hardly be computed, but offer of redress, or even apology is rarely heard.

While the personnel of the various local officials is improved, I contend that intelligent nurserymen, who have been growing trees and plants for twenty, forty, or fifty years, know vastly more about plant life in health or disease than do the well-meaning youngsters just out of school, or the appointees of a board of supervisors.

The most iniquitous part of the whole farce is for the self-constituted judge and jury to rush into his local paper and publicly besmirch the good name of a man who has been honorably conducting business for a quarter or half a century because, forsooth, there is an insect, real or imaginary, on a tree; because he finds a so-called "knot" which is often but a mechanical enlargement caused by the twisting together of the young roots; or a "callous" on the cut surface of the root! These illustrations are actual ones, and I could relate hundreds of them. In all these things the inspectors exceed their authority.

INSPECTION AT PACKING HOUSE

The nurserymen want a state law, with rigid inspection at the point of shipment, or, in other words, at the packing house during the packing season. I doubt if there are a dozen nurseries in California that would require the constant, consecutive inspection of even one man. The work could be systematized and the majority of the nurseries could have certain hours or days for inspection when stock was to go out of the county. The tax-payers would be the gainers. Either they would get better service for their money, or appropriations could be reduced or returned into a more worthy channel. For what is the use of inspection and inspectors' certificates if nowhere honored? It is like the law saying every package by mail containing seeds, cuttings, plants, etc., shall be inspected, but providing no means wherewith to do the inspecting.

I believe in the "gospel of good tidings." There is everywhere a "rattling of dry bones," a shaking off of the trammels of superstition and creeds. Sanitation and right-living applies as much to the plant world as to human beings. Cleanliness and temperance save life while drugs destroy it.

You send your soldiers to the Philippines and they are under orders as to what they shall eat and what they shall drink. They are in an artificial environment. So is a cultivated tree. Drugs that kill and cure are no more necessary than with the transplanted soldier. The same law holds good with every living thing, whether it be the king on his throne or the beggar in his hovel, the wild animals of the forest or the insects that feed upon your trees, the humble weed by the roadside or the stately tree in your parks.

I cast reflections upon no one in all these remarks. I do not expect anyone to agree with all that I have said, and I look for but a few who will not differ in most of these ideas, at present. I only ask that they be not condemned without thought.

I believe all are working in what they now think are the best interests of horticulture in California, but I hope that some may be encouraged to act as a result of an ever broadening grasp of the true idea of the harmony in which all exist.

BOOKS ON WILD FLOWERS

FIELD BOOK OF AMERICAN WILD FLOWERS, F. Schuyler Mathews. Published by G. P. Putnam's Sons. 1912. Illustrated. 587 pages. 7 x 4 inches. Price, \$2.00.

In this volume of the pocket manual type, we have compressed into convenient form descriptions and full page illustrations of a large number of the more striking wild flowers of the Northeast. The lithographs are exceedingly well done, while the wood cuts are sufficiently clear to be of direct assistance in distinguishing the plants described. The book includes not only perennials of the herbaceous type, but also ligneous plants of the character of roses, and climbing plants such as bittersweet and the like. There is certainly no excuse at the present time for anyone to be without a non-technical, handy manual to assist in the identification of flowers which he may meet along the wayside or in more extended tramps in the woods or on the prairie.

WILD FLOWERS OF THE NORTH-EASTERN STATES, by Ellen Miller and Margaret Christine Whiting. Published by G. P. Putnam's Sons. Illustrated. 620 pages. 7½ x 10½ inches. Price, \$3.00.

This volume contains a selection of 308 plant individuals common to the north-eastern United States. A full page of the 8 x 10 sheet is devoted to a line drawing, while the opposite page carries the descriptive matter. While the drawings are cleverly executed there is not always sufficient detail to make identification more than approximately certain. The descriptive matter does not give the geographical distribution of the plant, which seems to us rather an important omission. It is true that most of the plants described are found quite generally distributed throughout the whole of the northeastern states. One of the more valuable features of the letter press is the general summing up which the authors give of the character, appearance, and sometimes values of the plant; in other words, the general impression which a visitor to a plant community of this or that type might receive. For instance, the pokeberry is said to be "a plant of homely gesture and rather strong odor, redeemed by its luxuriant growth and the fine quality of its foliage." Then some of the qualities of the plants are mentioned, which are often overlooked in more technical descriptions, as, for instance, in the case of the pokeberry, "the berries are favorites with children, who squeeze them to use their deep magenta-crimson juice for writing and painting and dyeing purposes." This volume belongs rather to the library of the well-to-do amateur than to the book collection of the botanist or plantsman.

SEVERE HAILSTORM AT OUDENBOSCH, HOLLAND

It is reported the nurseries at Oudenbosch suffered heavily through a severe hailstorm, which lasted about a quarter of an hour. Maples and other nursery stock were much damaged. Greenhouses also suffered heavily one firm having 20,000 panes of glass broken.

Note and Comment

A writer in a recent issue of the *Rural New Yorker*, describing methods of propagating fruit trees in that region, makes the rather unique statement that "most of our natural fruit seedlings with the exception of the apple are imported from France." As a matter of fact, nearly all the apple seedlings which are imported do come from France, and these represent a very considerable share of the apple seedlings used by American nurserymen. It is true that large numbers of apple seedlings are grown in the Middle West, but it is quite certain that an equal if not a greater number come to us from the nursery regions of France each year. The statement also implies that peach trees are imported, which of course is another bad mistake of the paragrapher. He says in this connection that "a transplanted peach seedling would grow too big to be budded to the best advantage, so the peach pits or meats are handled in such a manner that they may be budded the same season that they are sown." Here again our friend shows lack of familiarity with nursery methods. While it is quite true that probably nine-tenths of all the peaches grown are budded the same season, yet it is also true that some nurserymen practice the plan of transplanting their peach seedlings at a very early stage in the growth of the seedling, so that their trees may be placed at regular intervals in the nursery row. This is after the plan practiced by the French grower of apple, pear, and plum stocks.

FORESTS AND STREAM FLOW

It has long been a moot question as to whether forests really affected the rainfall. No data has been available to say it is absolutely true that forests regulate the flow of waters by holding back spring freshets. Studies made by the United States Geological Survey in this connection are interesting, as reported in a late issue of *Science*. The results found in the case of two similar drainage basins in the White Mountains, each containing about five square miles, are as follows: "Measurements of precipitation over the areas and of the run-off of the respective streams show that not only was the snow held better in the forested area, but that during a period of 17 days in April, including three extended storms, the run-off of the stream in the deforested area was a comparative flood—practically double that of the stream flowing through the forested area."

WANTS THE EARTH

One of the most unusual claims ever filed with a city department is that of Squire Herrick, at one time a well known nurseryman, recently filed with the Cincinnati Park Commission. Herrick had leased his nursery on Price Hill to the commission which raised seedling trees and shrubs there. These were later transplanted in various city parks.

Herrick now says that when the trees and shrubs were dug up some of his earth clung to the roots. He wants to be paid for the earth which was thus removed from his property. He says that during the last four years there must have been fifty-five cartloads of it, and asks \$2 a load.—*N. Y. Tribune*.

Doings of Societies

The new officers of the American Retail Nurserymen's Protective Association elected in June are as follows: President, H. W. Marshall, Arlington, Nebraska; vice-president, B. J. Greening, Monroe, Michigan; secretary and treasurer, Guy A. Bryant, Princeton, Illinois; executive committee, H. W. Marshall, B. J. Greening, and Guy A. Bryant.

At the recent meeting of the Idaho Nurserymen's Association, Mr. C. W. Hawkes, Caldwell, was chosen president; Mr. J. F. Carnifex of Fruitland, vice-president; J. F. Littooy of Boise, secretary. The meeting was regarded as very successful, and all present expressed themselves as highly pleased with the acquaintances made and the information gained. It was decided that the next winter meeting should be held at Boise so as to be in touch with the Horticultural Society and with the Legislature. The mid-summer meeting will be at Payette.

MEETING OF CONNECTICUT NURSERYMEN

The Connecticut Nurserymen's Association were in New Haven, August 9th, for their annual summer outing. The objective point was The Elm City Nursery Co., whose nurseries are located just beyond Edgewood Park in the new Edgewood suburb.

The nursery business has become one of Connecticut's important industries and the amount of capital and number of men engaged in the business would be a source of surprise to those who are unfamiliar with such matters. The old New England hills which have in the past years become unprofitable for farming purposes in competition with the great west, are proving to be eminently suited to the production of the finest fruit, fruit which compares favorably with the finest production anywhere in the country. Not only can we grow under modern means of cultivation apples which are as fair as the Oregon brand, but we can beat them on quality and keeping qualities. The same is true of peaches, pears, plums, quinces, etc., so that the hillsides of our fair state bid fair to soon be one great orchard and add another important industry to our estate. The demand for ornamental stock has enormously increased in the past few years as parks are being developed in every city and town, private estates and homes are being rapidly evolved which compare favorably with the finest homes of Europe and practically every home place even down to the smallest

garden now shows signs of care and attention. Such a movement as this makes an increasing demand for nursery stock.

The Elm City Nursery Company's extensive grounds are a just source of pride to all New Haveners. Developing from small beginnings a few years ago this nursery now ranks among the most important in the country. The grounds, especially about the office, are laid out in a true landscape style and few private estates are kept up with greater care. One special feature at the nursery which interested the convention members was a rare collection of Japanese Dwarf trees and plants, old stone lanterns, etc., which have been

arranged in such a way as to give a good idea of an old Japanese garden. This collection was collected by one of the members of the firm two years ago personally in Japan and is probably as fine as any in the United States.

After looking over the Nursery's very complete office, packing, cold storage, and shipping facilities, the members of the association took an auto ride through the many nursery fields. It was generally voted that few nurseries are kept up with as great an amount of care and attention

to the developing of each individual tree and plant. Dinner had been ordered at the West Shore and the members all piled into the autos waiting for them and after a pleasant ride about New Haven's principal streets made their way to the shore.

BULLETIN OF NORTHERN NUT GROWERS' ASSOCIATION

The time has come to realize that nut growing is to be one of the great industries of the future and an important source of human food. An indication of this is the increase in importations of nuts and nut products which, in the face of large increase in domestic production, amounts to millions every year. During the first eleven months of 1909 the importations of nuts and nut products were valued at \$9,745,611; during the same period in 1910, \$11,906,668, and in 1911, \$13,717,104. We ought really to be exporting nuts.

FOOD FOR THE BODY AND FOR THOUGHT

Bread, butter and beefsteak are furnished by nuts, in a nutshell, in tablet form, in sealed individual packages, water free, concentrated and uncontaminated. Yearly seeding, milking or butchering are not required.

A few bushels of chestnuts, hickories and walnuts from one's own trees would help solve the high cost of living.



VIEW DOWN ONE OF THE ARBORS. PART OF THE EXHIBITION GROUNDS AT THE ELM CITY NURSERY COMPANY, NEW HAVEN, CONN.

The countries of the older Eastern World set nut trees along their highways and sell the nuts for public revenue.

The pecan tree in the South has shown that grafted nut trees may be expected to fruit as early as the apple. Grafted nut trees of several varieties for the North can now be had from nurserymen. The want of them heretofore has been a difficulty, since seedling trees are very slow in fruiting and their nuts of uncertain character.—Dr. W. C. Deming, Secretary Northern Nut Growers' Assn., Westchester, N. Y.

DUTCH FARMERS FOR NEW YORK

It is interesting to note that once more, after a lapse of some two hundred years, a number of Hollanders may come to this country to settle on farms in New York State; for a movement is on foot, promoted by the Delaware and Hudson Railroad, to bring over a group of "thrifty Dutch farmers" to work some of the abandoned farms of northern New York. According to the *Knickerbocker Press*, of Albany, the fulfillment of such a plan would be a great boon to the farming interests of the state, since agricultural authorities have declared the wisdom of the idea. It seems as if the great Empire State ought to be able to draw occupants for these farms from her own population—as if some of the experienced and well-to-do farmers in her midst might be induced to take an interest in developing her agricultural resources in this region; but if it is true that the method suggested is the best way to solve the problem of the idle farm lands, then may it be carried out with all speed.

fruit and plant Notes

SHRUBS WHICH HAVE PROVED THEMSELVES HARDY IN THE NORTHWEST

C. L. Meller, in *The Garden Magazine*, recommends the following shrubs as being hardy and desirable in the Northwest:

Of the popular shrubs of the East, none exceed Tartarian honeysuckle and Van Houtte's spirea in hardiness, and the two in combination, showing the mass of white in front and the delicate pink above, are particularly pleasing. The native gooseberry, with greenish white flowers, is easy to propagate, and will thrive almost anywhere, even when sadly neglected. Many kinds of lilacs are satisfactory in North Dakota, the Persian lilac being an exception. The snowball is somewhat irregular in blooming, but in favorable seasons seems to excel its kindred in the East. The mock orange proves valuable as a warning, in that it droops with any lack of moisture. The elders and several variations of spirea besides the one mentioned above furnish abundant white bloom during a large part of the summer, while the common dogwood proves a surprise by bearing fruit, blossoms and buds all at the same time.

Several shrubs bearing red fruit flourish in this region, among them highbush cranberry, native rose, the hawthorns, and sumac. Among the shrubs which prove attractive through their foliage alone and are suitable for this climate are buffalo berry, badger bush, golden elder, and tamarix.

FOREST TREES FOR POSTS

An inquirer in the *Rural New Yorker* of recent issue is advised to plant black locust, *Catalpa speciosa*, chestnut, and European larch. We are thankful to note that he has been advised not to plant Carolina poplar. On the other hand, it is doubtful whether the advice to plant black locust is good. This tree is so viciously and generally attacked by borers that, unless one makes up his mind to fight this enemy and fight him to death, there is little satisfaction in planting this tree. On the other hand, we are of the opinion that both European and American larch are trees whose good points are very much overlooked. They are thought to be rather slow growing. It is also a common mistaken belief to think that they need wet or low ground. The larch will succeed splendidly on chestnut soil, but like all forest seedlings when first set out, should be cultivated as carefully as a corn crop. After it is established, that is to say, after three or four years' cultivation, it will shade the ground sufficiently when planted, as it should be, about five feet apart each way, to keep down all weed growth, and thoroughly take possession of the soil. In view of the fact that the chestnut is being so freely destroyed by the chestnut bark disease, it is doubtful whether one should risk losing his labor by setting this tree at the present time. We would rather take our chances with catalpa.

WHITEWASHING TO PROTECT PEACH TREES

Some years ago Prof. J. C. Whitten, of the Missouri Experiment Station, reported an experiment in spraying peach trees with whitewash during late winter or early spring. The object in giving this white coating was to reflect the heat and keep the trees dormant during late winter and spring. If this could be done of course blooming would be somewhat delayed, and thus the danger from a late frost would not be so great. Very little has been heard lately about this practice. A number of our readers have asked about it, and Professor Whitten has made the following report:

"Perhaps the most practical data I can give you is to suggest that for 10 consecutive years we whitewashed diagonal rows of peach trees across the Experiment Station orchard just before midwinter. In this section we had five general peach crops during that 10 years on untreated trees; on whitewashed trees of the same varieties we had eight crops. The five crops on untreated trees were not all full crops; the eight crops on treated trees were all but two full crops. More than double the amount of fruit was secured in 10 years on the whitewashed trees. The treated trees were anywhere from a few days up to 10 days later in blooming. In years when normal weather prevailed until sudden warm spells brought the trees into bloom hurriedly, there was only a little difference in time of blooming, and under normal conditions there was a week or more difference in their blooming. This is less important, however, than the fact that the whitewashed trees began their first starting into slight growth on sunny days in late winter fully six weeks later than the naked trees. Almost every winter in this section, dormant peach trees will endure any cold weather that we have. There was a period of six weeks during the

last part of the winter and early spring when the whitened trees were fully dormant after unwhitened trees had begun to swell and grow enough to make them susceptible to injury from any severe cold.

"Only a few progressive orchardists so far as I know are attempting to whitewash. A few have tried it, however, and of those who have tried it thoroughly, most of them say that it pays. Now as to whether it would be commercially successful in a maritime climate like most of New York State, I am unable to say. Of course in this interior section we have an intensely bright sunlight. Purple coloring matter on untreated peach trees often absorbs heat enough on a sunny cold day in winter to raise the temperature of the trees 25 degrees or more above the temperature of the atmosphere. Whitened trees remain at atmospheric temperature or usually a degree or so below. Whether that great difference would be felt in the lake region in New York, I am unable to say.

"Again, it should not be believed that whitewashing is a sure preventive of winter injury to the peach trees, because winter weather may sometimes in peach districts be cold enough to kill even the dormant fruit buds. If such temperatures prevail, whitened buds would probably kill as quickly as those which are not whitened, because all that the whitewashing is expected to accomplish is to keep the buds dormant."—J. C. Whitten, *Rural New Yorker*.

Among the Importers

AUGUST ROLKER & SONS, NEW YORK CITY

EDWARD L. BERNAYS

August Rolker & Sons, nursery stock importers, established in 1853 in New York, at present the partnership of Joseph A. and Wilfried Rolker, still hold the traditions of their fatherland dear, for although Mr. J. A. Rolker was at first somewhat reticent in giving an interview, as soon as he got started on the precision, the thoroughness, the scientific skill of the Kaiser's subjects in the nursery industry, his enthusiasm carried him away and he had much to say.

The Rolkers represent a variety of interests here. Their importations vary from forest trees from Germany to curious and grotesque swans and elephants from Holland, besides palms, lilacs, azaleas, seeds, and fruit seedlings.

When it came to a discussion of the foreign trade journals, Mr. Rolker noted that they pursued a different policy from the American journals. While the English and German journals specialize on a particular topic in each issue and try to exhaust its possibilities, the American journal tries to appeal to the greatest number by dealing with the field in general. Thus a German horticultural paper dealt exclusively with the cyclamen, while the American horticultural journal dealt with everything from cabbages to kings. As to these two policies, we can only say with the keeper of the tavern, that there is much to be said on both sides.

TOPIARY WORK STILL PRACTICED

William Keesen, Jr., of Terra Nova, Holland, specializes particularly in designs wrought out of box and yew. A large catalogue, showing things of beauty and joys forever, repre-

sents the acme of such training. One picture showed a sailing vessel, two masted and fully rigged with rudder aft and pennant floating from the masthead—all grown from one plant. Whether it was to spend its life on the lawn of a millionaire yachtsman, to impress neighbors, or whether it was to remain sixteen years longer in the gardens at Terra Nova, it represented a deal of scientific training. But from the artistic standpoint, we would rather see sailing vessels in the sea, and lilac bushes on lawns. It seems a right happy circumstance that America has not touched this sort of art to any great extent yet. "God grant that in my day at least that curtain may not rise." It is a good thing that these ornaments are at present too expensive even for our millionaires. It is left to future interviewers to see presidential possibilities growing in effigy on our most refined lawns, or to watch the evolution of a young charming girl from babyhood upward from our back porch. On the other hand, it was noticed that the pictures of the plantations of foreign growers were particularly well arranged and well kept. The plots lay side by side with the symmetry of chess squares. Their regularity can only be compared to the schedule of letter writing that an obedient husband follows in writing to a far distant wife.

FRUIT VARIETIES IN AND ABOUT OKLAHOMA

Bulletin 95 of the Oklahoma Experiment Station brings out the interesting fact that the varieties of apples which were standards in the Oklahoma region forty years ago are still the most popular and most successful varieties there. The same is not true of other fruits. In preparing this bulletin, questions were sent out to a large number of growers regarding the behavior of certain varieties. Some of the results are as follows:

	Favorable	Unfavorable
APPLES—Ben Davis	218	13
Jonathan	158	4
Winesap	178	4
PEACHES—Elberta	263	1
PEARS—Kieffer	193	3
Bartlett	121	14
Garber	96	3
PLUMS—Abundance	176	7
Wild Goose	165	0
Red June	99	11
CHERRIES—Early Richmond	145	4
GRAPES—Concord	233	3
Niagara	142	4
Delaware	125	3
STRAWBERRIES—Gandy	63	4

The bulletin concludes that since the day of seedling orchards is past, the day when any considerable numbers of new varieties will appear is also gone.

J. B. Pilkington, of Portland, Ore., vice-president of the American Association of Nurserymen has just returned from his European trip with the wife and family. On his way from New York City to Portland he called at the office of the NATIONAL NURSERYMAN and paid a visit to his Rochester friends, and those in Dansville. Mr. Pilkington guarantees that the nurserymen will have the best time of their lives when they go to Portland in June to attend the annual convention.

ENFORCEMENT OF FEDERAL PLANT QUARANTINE LAW

By an act of Congress approved by the President on August 20, 1912, entitled "An act to regulate the importation of nursery stock and other plants and plant products," etc., the Secretary of Agriculture is authorized and directed to quarantine any State, Territory, or District of the United States, or any portion thereof, when he shall determine the fact that a dangerous plant disease or insect infestation new or not theretofore widely prevailing in the United States, exists in such State, Territory, or District. Before promulgating his determination that it is necessary to institute such a quarantine, he shall give a public hearing, at which any interested party may appear and be heard either in person or by attorney.

The Secretary of Agriculture is further directed to prohibit the importation into the United States of any class of nursery stock, fruits, vegetables, roots, etc., whenever he shall determine that such prohibition is necessary to prevent the introduction into the United States of any tree, plant or fruit disease, or insect infestation, new or not widely prevalent within the United States. Before issuing his proclamation to this effect, he is directed, as in the case of quarantine against a State to give a public hearing to any interested parties who may wish to appear in person or by attorney.

There is imminent danger of the introduction into the United States at the present time of two dangerous plant diseases and one insect known to cause great damage in other countries. One fungus disease, the white pine blister rust, injures four important species of pine in practically all European countries. It is a fungus disease and would be a most undesirable importation into the United States if it be brought here, as it is liable to be on imported nursery stock. It would soon cause enormous damage to coniferous forests.

Another fungus disease which is a menace to American agriculture is the potato disease known as potato wart, potato canker, black scab, etc., caused by a fungus which, in advanced stages of the disease, utilizes every particle of food in the tuber and reduces it to a brownish black soft mass of a very unpleasant putrid odor. The disease occurs in many parts of Europe and in several islands not far from the Atlantic coast of the United States.

The menacing insect pest is the Mediterranean fruit fly, an insect which is tolerably well described by its name, and which is now known to be established in the Hawaiian Islands. Its introduction into the United States from the Territory of Hawaii would be a calamity of the first importance to fruit growers. The State of California, because of this insect, now quarantines against a long list of fruits and vegetables from Hawaii, including oranges, Chinese plums, prickly pears, Damson plums, peaches, figs, tomatoes, grapes, squashes, and a large number of less well known fruits and vegetables. Other Pacific coast States, however, have no such quarantine, and the introduction of the insect through ports in those States is possible and perhaps imminent. It is also found in Queensland, New South Wales and West Australia.

To prevent these undesirable immigrants from entering the United States, the Secretary of Agriculture proposes to exercise the power vested in him by the new law and declare a quarantine against the Territory of Hawaii in the case of the Mediterranean fruit fly, and also to prohibit the importation from Great Britain, France, Belgium, Holland, Denmark, Norway, Sweden, Russia, Germany, Austria, Switzerland, and Italy of four species of pines and their horticultural forms liable to introduce the white pine blister rust, namely, white pine (*Pinus strobus* Linnaeus), Western White Pine (*Pinus monticola* Douglas), sugar pine (*Pinus lambertiana* Douglas), and stone or cembrian pine (*Pinus cembra* Linnaeus). The importation of potatoes that may bring the potato wart disease from Newfoundland and the islands of St. Pierre and Miquelon, and from Great Britain, including England, Scotland, Wales and Ireland, and from Germany and Austria Hungary will also be prohibited.

In compliance with the law, however, he will, before issuing his quarantine proclamations, give public hearings to persons interested who may appear in person or by attorney, or submit their views in writing. Announcement is hereby made that these hearings will be held as follows;

On the white pine blister rust, September 16, 1912.

On the Mediterranean fruit fly, September 18, 1912.

On the potato wart disease, September 20, 1912.

All hearings will be held at the Department of Agriculture, Washington, D. C., at 10 o'clock a. m., on the dates above specified.

Photographs illustrating the three dangers above mentioned can be obtained upon application to the Chief of the Division of Publications, Department of Agriculture, Washington, D. C.

SHARING THE PROFITS

Almost innumerable are the articles written by manufacturing concerns and wholesale firms on such subjects as "Waste of Labor," "Cutting the Cost," "Lost Motion," "Leaks," "Short Cuts," etc. Some of the methods tried have proved successful but it is difficult to find a system, no matter how general the plan, that will prove satisfactory to firms producing different kinds of products under unlike circumstances.

The Oregon Nursery Company, of Orenco, Oregon, is just putting into effect an experiment which ought to cover field enough to prove effective in regard to all of the above mentioned subjects. The plan is to get the employees interested in the profits of the company but not become stockholders of the company. It is outlined as follows:

M. McDonald, president of the Oregon Nursery Company, has placed in trust with the Oregon Nursery Company certain shares of its capital stock owned by him, against which the Oregon Nursery Company has issued profit sharing certificates. These certificates are sold to the employees in denominations of \$10.00 and upward. The profit sharing certificates are issued against the original shares of stock in denominations, the sum of which equals its present valuation. Each share's worth of certificates will receive the amount earned by the original share of stock which will be divided

pro rata among the holders of the profit sharing certificates, according to the amount held by each.

Only the employees who have been with the company one year will be allowed to purchase these profit sharing certificates. It is guaranteed by the Oregon Nursery Company that the certificate shall not earn less than 6% on the investment. Each employee investing in these certificates will be given a certificate of a like amount up to and including \$100.00, with the understanding that 6% interest will be deducted from the profits earned by the additional certificate.

A board is appointed to pass upon and approve of all applications made for the Profit Sharing Certificates. Any employee holding one of these certificates and desiring to leave the company permanently during the year, or any whom the company may wish to retire, will be paid face value of the certificate with 6% interest from date of the certificate until retired.

In order to aid and encourage those who have not been in the employ of the company a year, it is agreed that deposits may be made with the company upon which they will receive 6% interest, thus encouraging them to save their earnings until such time when they may purchase profit sharing certificates.

The certificates are good for one year and must be surrendered at the annual meeting of the stockholders on the first Monday in August, at which time if the plan is to be repeated another year, new certificates will be issued.

At this date the response has been far beyond our expectations and gives a representative expression from the body of employees. We hope the plan will foster a sentiment of unity which will be of mutual profit to employer and employee.

OREGON NURSERY COMPANY,
Per R. E. Parsons,
Assistant Secretary and Treas.

PERENNIAL PHLOXES

As an occupant of the informal perennial border, phlox is one of the most satisfactory. As a summer and autumn bloomer, it may be relied upon. As a plant which when established multiplies itself and gives the owner the satisfaction of dividing and subdividing his clumps, it is all that can be desired.

Extraordinary improvement has taken place in the perennial phloxes in the past ten years. Both French and German hybridists have been at work, and the range of color, size of the bloom, has been greatly increased.

The white varieties have always appealed to the writer. They are among the earliest of the group, though not among the strongest growers. Some of them are notably free, however, from the attacks of red spider, which is an enemy to be reckoned with in the culture of this form of the phlox. A writer in a recent number of *The Garden Magazine* recommends Von Lassburg, Helena Vacaresco, Purity, and Miss Lingard as desirable white varieties.

Among the scarlets with salmon tinge, the same writer recommends Goliath and Brilliant. Of the true scarlets,

George H. Strohlein and Baron Van Dedam are said to be exceptionally fine. Among the crimsons, Comte Von Hochberg is popular, while Captain Wilhelmy and Rosenberg, the latter a very large flowered variety, are favorites with those who grow phloxes in profusion.

Among the pinks, Beranger, Madame Paul Dutrie, and Buchner are recommended. Of course, the term pink is somewhat generic, and represents a variety of shades into which may be grouped several distinctive forms upon the basis of color tints.

The perennial phlox exhibits a great variety of color, and we go from pink to rose and so on through magenta, carmine, to blue, lavender, and the like. Of the roses, Paul Martin and Pantheon are good representatives. Of the blues, Le Mahdi is strikingly characteristic of the shade of the English violet. Merlin and Javanaise, two of Lemoine's creations, are highly recommended. Among the purples, Gypsy and King, Franklin and La Nuit are highly spoken of, and among the carmines, Edmond Bossier and Obergartner Wittig are two of the best.

Among the parti-colored are Belle Alliance, Richard Wallace, and Aglae Adanson; crimson and white, and De Mirbel, rose and white. Of the lavenders and lilaes, Antonin Mercie and Daniel Leseur are increasing in popularity. Phlox specialists speak of grey shades in the flowers of this group, but one can hardly believe that a flower of this color would be specially attractive. The writer in *The Garden Magazine* referred to is of the opinion that these shades are unfixed productions, in other words, forms in the process of evolution. We agree with the writer that as a rule the solid colors are the most attractive.

The phlox for its highest development needs a good deal of moisture and a strong soil. Dryness and heavy clays do not agree with it, and troubles soon arise. The phlox is exceedingly hardy and is to be numbered with the herbaceous plants adapted for cultivation in the cold North and West. The phlox, the iris, and the peony form a garden trio difficult to surpass from the standpoint of vigor, beauty of flowers, and ease of culture.

THE SEPTEMBER AMERICAN BOY

The September issue of *The American Boy* fairly overflows with good reading matter. In quantity as well as in quality the publishers have this month exceeded the high average which they maintain for this model boys' magazine.

The articles on How to Play Football, written by members of the All-American Eleven, the first of which appears in this issue, promise great things in the way of interest as well as instruction for the followers of the great autumn sport. The September articles are by Sanford B. White, of Princeton, and Leland S. Devore, of West Point.

How a Motor Car Runs, by Lee Anderson, is a remarkable technical article making clear the construction and mechanism of this modern wonder. It is an article for father as well as son.

Besides the two attractive serials, special articles of note, and the usual valuable departments, there are six short stories of merit. Two of these are humorous stories of the better sort, and the others wholesome tales of thrilling adventure.

The introductions of humorous drawing by artists of national repute adds a pleasing touch to this already attractive publication.

\$1.00 a year. Published by The Sprague Publishing Company, Detroit, Mich.

Catalogues Received

The Huntsville Wholesale Nurseries, Huntsville, Ala. August advance price list.

W. N. Scarff, New Carlisle, Ohio. Semi-annual surplus list of bush fruits.

Bay State Nurseries, N. Abington, Mass. Wholesale price list.

Jacs Smits & Co., Naarden, Holland. Wholesale catalogue, American edition for the season 1912 and 1913. Also nursery private code.

Graham Nursery Co., Mechanicsville, Iowa. Wholesale price list. Federico C. Varela, Teneriffe, Canary Islands, Province of Spain, final report on Bermuda onion seed.

F. Delaunay, Angers, France. C. H. Weber, Greenfield, Ind., American agent. Catalogue for season of 1912, 1913.

Alma Nurseries, Oudenbosch, Holland. Trade catalogue for 1912-13.

Green's Nurseries, F. D. Green, Prop. Farmville, Va. Semi-annual wholesale price list.

M. Herb, Naples, Italy. Catalogue of bulbs and flowers.

R. H. Bath, Ltd., Wisbech, England. Special trade list of bulbs, roses, carnations, peonies, clematis, etc.

C. Kerkvoorde, Wetteren, Belgium—Aug. Rolker & Sons, sole American agents. Special trade list of nursery stock.

C. R. Burr & Company, Manchester, Conn. Special summer wholesale list.

Forest Nursery & Seed Company, McMinnville, Tenn. Wholesale trade list for fall, 1912.

Sluis & Groot, Enkhuizen, Holland, Crop report.

Van der Weijden & Co. Wholesale Nurseries, Boskoop, Holland. Wholesale trade list.

Jewell Nursery Company, Lake City, Minn. Jewell Trade News.

Ellwanger & Barry, Rochester, N. Y. "Peonies" for fall planting.

Hubert & Co., Ltd. Bulb, plant and seed growers., Guernsey, Eng.

WANTED

1000 Cherry $\frac{3}{4}$. Peach in exchange preferred. Also have to offer 17000 Silver Maple 1-2"; Moore Early Grape 1 yr.; Mersereau B. B. root cutting plants; 20000 Houghton Gooseberry Layers; 10000 Peach, extra fine, $\frac{1}{2}$ to 1 inch. Address

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High grade small nursery, in middle west, well stocked and equipped, all inside city limits of 2000 population. Buildings cost over \$8,000.00. Opportunity for two live young men. Account of health owner will make sacrifice for quick sale.

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A competent nurseryman for manager and working foreman. Must be honest and capable of handling men. A permanent position to right party. State particulars and salary wanted in first letter. Must have reference. Address, SAN JOSE, CAL., 580 Nor. 1st Street.

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Only one in 5 southern counties of the state growing a general stock; in a *FIRST-CLASS* location and fine transportation, close to large cities, Philadelphia 38 miles. Will make reasonable terms, as I can not give it the proper attention.

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and Asparagus in surplus**

Need a general assortment and would exchange
PERRY NURSERY COMPANY, Perry, Iowa

C. & J. Well KNOWN GROWN Shrubs and Roses

Althea Banner, 4 to 5 ft.
Banner, 18 to 24 in.
Banner, 5 to 6 ft.
Banner, 2½ to 3 ft.
Althea Bicolor, 18 to 24 in.
Bicolor, 3 to 3½ ft.
Bicolor, 3 to 4 ft.
Althea Jeane d'Arc, 3 to 4 ft.
Jeane d'Arc, 18 to 24 in.
Jeane d'Arc, 5 ft.
Jeane d'Arc, 2 to 3 ft.
Jeane d'Arc, 4 to 5 ft.
Althea Meehani, 8 to 10 in.
Meehani, 12 to 18 in.
Meehani, 18 to 24 in.
Althea Pink, 18 to 24 in.
Pink, 2 to 3 ft.
Pink, 3 to 4 ft.
Althea Red, 18 to 24 in.
Red, 3 to 4 ft.
Althea Violet, 12 to 18 in.
Violet, 18 to 25 in.
Azalea Mollis Yellow, 18 to 20 in.
Azalea Mollis Named Sorts, 18 to 20 in.
Mollis, Red, 18 to 20 in.
Mollis, 6 to 8 in.
Barberry Thunbergii, 18 to 24 in.
Thunbergii, 12 to 18 in.
Thunbergii, 6 to 8 in.
Crinnells, 3 to 4 ft.
Crinnells, 2 to 2½ ft.
Crinnells, 3 ft.
Deutzia Crenata, 2½ to 3 ft.
Crenata, 3 to 6 ft.
Crenata, 4 to 5 ft.
Deutzia Gracilis, 8 to 10 in.
Gracilis, 10 to 15 in.
Deutzia Gracilis Rosea, 10 to 12 in.
Gracilis Rosea, 2 to 3 ft.
Gracilis Rosea, 2 to 2½ ft.

Deutzia Lemoinii, 12 to 14 in.
Lemoinii, 2 ft.
Deutzia Pride of Rochester, 2½ to 3 ft.
Euonymus Japonica, 2 yr., 12 in.
Radicans, 2 yr., 12 in.
R. Variegata, 2 yr., 12 in.
Forsythia Golden Bell, 12 to 15 in.
Golden Bell, 3 to 4 ft.
Hydrangea Paniculata Grandiflora,
3 to 3½ ft.
Paniculata Grandiflora,
2½ ft.
Paniculata Grandiflora,
12 to 18 in.
Hydrangea Arborescens, 12 to 18 in.
Arborescens, 2 to 3 ft.
Philadelphus Single, 2 to 3 ft.
Single, 4 to 5 ft.
Single, 3 to 4 ft.
Philadelphus Double, 2 to 3 ft.
Double, 4 to 5 ft.
Privet California, 18 to 24 in.
California, 5 to 6 ft.
California, 12 to 18 in.
California, 2 to 3 in.
Spirea Anthony Waterer, 5 to 6 in.
Anthony Waterer, 12 in.
Anthony Waterer, 2 ft.
Spirea Prunifolia, 3 to 4 ft.
Prunifolia, 12 to 15 in.
Prunifolia, 3 to 3½ ft.
Prunifolia, 3 to 4 ft.
Spirea Van Houttei, 10 to 12 in.
Van Houttei, 3 to 4 ft.
Van Houttei, 4 to 5 ft.
Van Houttei, 12 to 18 in.
Spirea Forbelli, 2 ft.

Viburnum Opulus, 4 to 6 ft.
Opulus, 3 to 4 ft.
Opulus, 18 to 24 in.
Viburnum Plicatum, 3 to 4 ft.
Plicatum, 5 to 6 ft.
Plicatum, 3 to 3½ ft.
Plicatum, 12 to 18 in.
Weigela Candida, 2 to 3 ft.
Candida, 5 to 6 ft.
Eva Rathke, 4 ft. xxx
Eva Rathke, 2½ to 3 ft.
Eva Rathke, 2 to 2½ ft.
Eva Rathke, 2 to 3 ft.
Eva Rathke, 12 to 18 in.
Eva Rathke, 18 to 24 in.
Eva Rathke, 4 to 6 ft.
Eva Rathke, 3 to 4 ft.
Rosea, 18 to 24 in.
Rosea, 3 to 4 ft.
Rosea, 4 ft. xxx
Variegata, 12 to 18 in.
Variegata, 3 to 4 ft.

CLIMBERS

Honeysuckle Heckrottii, 3 ft.
Heckrottii, 8 to 12 in.
Honeysuckle Red-Coral, 3 ft.
Red-Coral, 8 to 10 in.
Red-Coral, 3 to 4 ft.
Honeysuckle Evergreen, 18 to 24 in.
Evergreen, 2 to 3 ft.
Honeysuckle Halliana, 18 to 24 in.
Honeysuckle Tatarica Yellow, 2½ to 3 ft.
Honeysuckle Golden, 12 to 18 in.

ROSES—Climbers

Universal Favorite, 3 yr.
Violet Blue, 3 yr.

Violet Blue, 1 yr.
American Pillar, 1 yr.
American Pillar, 2 yr.
American Pillar, 3 yr.
Dr. Van Fleet, 1 yr.
Dr. Van Fleet, 2 yr.
Miss Messman, 1 yr.
Excelsa, 1 yr.
Lady Gay, 1 yr.
Hiawatha, 1 yr.
Hiawatha, 2 yr.
White Dorothy, 2 yr.
White Dorothy, 1 yr.
Gardenia, 1 yr.
Dorothy Perkins, 1 yr.
Flower Fairfield, 1 yr.
White Rambler, 3 yr.
No Light, 1 yr.
No Light, 2 yr.
No Light, 3 yr.
Farquhar, 1 yr.
Farquhar, 2 yr.
Farquhar, 3 yr.
Ruby Queen, 1 yr.
Ruby Queen, 2 yr.
Ruby Queen, 3 yr.
May Queen, 1 yr.
May Queen, 3 yr.
Alba Rubifolia, 1 yr.
Evangeline, 1 yr.
Evangeline, 2 yr.
Evangeline, 3 yr.

SPECIALS

Sir Thomas Lipton, 3 yr.
Sir Thomas Lipton, 3 to 4 ft.
Rugosa Magnifica, 12 to 18 in.
Alice Aldrich, 18 to 24 in.

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Blueberries, Blackberries, Raspberries, Salmonberries, Salalberries, Oregon Grapes, Rhododendrons, Ferns, Spireas, Trilliums, Evergreens and other native plants. Collected fresh from the forest. For sale or exchange. Catalogue on request.

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Fall
price-list
ready

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Large assortment of Tree, Shrub and Fruit Seeds for ornamental and forestry purposes. Send for catalogue. CONYERS B FLEU, Jr.
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LET ME QUOTE YOU prices on all Conifers and Broad-leaved Tree and Shrub Seeds. Guaranteed fresh, true to name and good germination.

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DELIVERY AND PAYMENT according to usual commercial conditions.

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PRICES ON APPLICATION

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We will lease or sell a profitable 80 acre nursery, 50 years old. Write

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1 year Seedlings, 6 to 10 and 10 to 14 in.
Also transplanted stock, 2 and 3 yr., 12 to 18 in.

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50,000 Oriental

Plane Cuttings

I shall be pleased to receive by
mail a largest and smallest (dry
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HONEY LOCUST

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Seeds of Best Quality. Guaranteed New Crop.
Samples and lowest prices upon application.

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ESTABLISHED 1789

We offer to the Trade in stock that is strictly first
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APPLE. 1 in. up; $\frac{3}{4}$ to 1 in.; $\frac{5}{8}$ to $\frac{3}{4}$ in., and
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PEACH. 1 year and June buds.

PEAR. Long on Kieffer and Garber, all grades.

FIGS, JAPAN PERSIMMON, MULBERRY, GRAPE,
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FRUIT STOCKS

ROSES, Etc.

The largest stocks to offer in first-class condition at lowest
prices. All from sandy soil with excellent roots.

Best shipping facilities via Hamburg.

General Price-List free on application.

Lombardy and Carolina Poplars

8 to 10 ft.; 12 to 14 ft.; 16 to 18 ft.; 20 ft.

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Fine Lot Transplanted

1 to $1\frac{1}{2}$ ft.; 2 ft.

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General Assortment Nursery Stock

Apple, Cherry and Peach

IN CARLOAD LOTS

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SUCH AS

PEARS, APPLES, CHERRIES, PLUMS, Etc.

Best Qualities, Guaranteed New Crop
For lowest prices apply to

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LARGE STOCK

LOW PRICES

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field grown Hybrid Tea Roses on the seedling
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Hardy American Rhododendrons of the best
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250,000 Manetti Stocks first grade, grown on sandy ground and guaranteed
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25,000 Pinus cembra, from 6 in. to 3 ft.

25,000 Andromeda florabunda, in all sizes up to 2 ft.

5,000 Abies parryana Kosteriana from 1 ft. to 4 ft.

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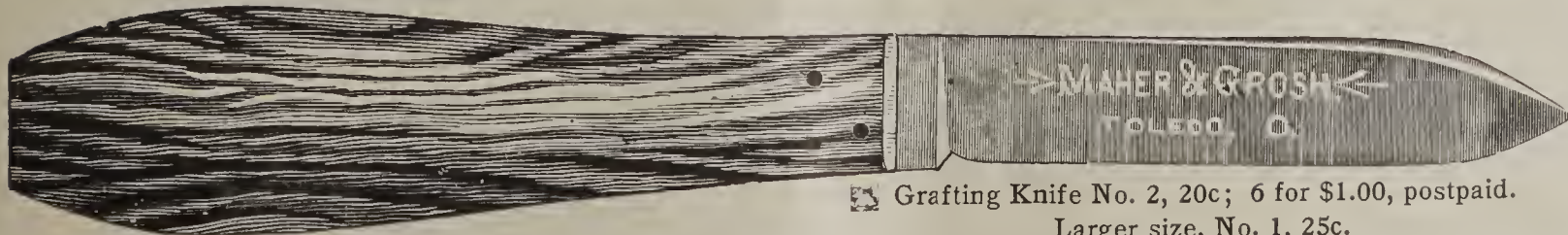
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A complete stock of all leading hardy varieties. Well cleaned and carefully tested. Prompt shipments made. Ask for what you want. Lowest offers on application.

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COLLECTORS AND EXTRACTORS
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Growers of a general line of

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OFFER FOR FALL, 1912, Peach, Pear, Cherry, Plum.
California Privet, 1 and 2-year, extra fine. : : :

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shown in our Retail Catalogue, page 23.

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PERSIMMONS PRIVET ARBORVITAE

Florida-Grown
True to Name

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Large assortment.

PLUM. Seedlings

BOX ELDERS ⁵/₆

SNOWBALLS

2 to 3 ft.

Compass Cherry Plum

5-6 ft. For Early or Late Fall Shipment, 1912.

G. D. McKISSON, Prop.

Fairmont Nurseries

FAIRMONT, MINN.

SGARAVATTI BROS.

SAONARA (Padua)

ITALY

Fruit-Tree Seedlings, Forest-Tree Seedlings,
Rose Stocks, Vines

Prunus Myrobolana Seedlings

PRUNUS MYROBOLANA SEED

PRICES ON APPLICATION

WHEN YOU NEED



Apple Seedlings
Apple Buds
Apple Grafts
Apple Scions
Apple Trees

REMEMBER

JIM PARKER,

The Apple Tree Specialist,
TECUMSEH, OKLAHOMA

P. E. VAN DE LAAN

VEENDAM, HOLLAND

Cable address: Nurseries, Veendam

Begs to inform the trade that he will have to offer next season very large quantities of his well known FRUIT TREE and ROSE STOCKS of A1 quality.

Fumigation with Hydrocyanic Acid Gas Generated From Cyanide ⁹⁸/₉₉%

Is the only positive eradicator of San Jose Scale and other Insect Pests. Endorsed by all agricultural experiment stations.

Manufactured by

The Roessler & Hasslacher Chemical Co.

100 WILLIAM ST., NEW YORK

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1912

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all cleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. C. 3
Long Distance Phone and Telegraph, Salisbury, Md.

Meneray-Crescent Quality Stock

For shipment in the Spring of 1912, we offer a varied line—everything well grown and the best in every respect. Our facilities in every way are excellent—growing, handling, packing and shipping. Satisfactory delivery is assured.

French Stocks and Seedlings

We are the sole United States and Canadian agents of SEBIRE-CAUVET, MESNIL-ESNARD, (Seine-Inf.), FRANCE and offer for his account a general assortment. The prices are right and the quality of the stock is unexcelled.

Send Your Complete List of Wants for a Special Quotation.

F. W. MENERAY COMPANY

Crescent Nurseries

Council Bluffs, Iowa

J. H. SKINNER & CO.

Station "A," Topeka, Kansas.

Fruit, Shade and Ornamental Trees

∴ FLOWERING SHRUBS ∴
APPLE AND PEAR SEEDLING
∴ FOREST TREE SEEDLING ∴

WE OFFER

For FALL 1912

Grape Vines, Currants and Gooseberries
in all varieties and Grades

—also—

**Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows**

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

Vincennes Nurseries

Vincennes, Ind.

W. C. REED, Prop.

We are pleased to offer for Fall, 1912, and Spring, 1913,

CHERRY—Two Year. All leading sour varieties.

CHERRY—One Year. General list leading sorts sour and sweets.

PEACH—One Year. 30 varieties.

APPLE—Two Year. All grades.

APPLE—One Year. Cut Backs very strong.

SILVER MAPLE. All grades.

Can furnish the above in Carload Lots or less. Also Pear, Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection invited.

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready end of September.

The Willadean Nurseries

SPARTA, KY.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WILLETT & WHELOCK

North Collins, N. Y.

Fagus Purpurea Rivers

Seedlings of a strain, which can hardly be detected from grafted plants. Of this strain a good many plants are selected and preferred to grafted plants.

We offer a few thousands about
18 to 24 inches high

KALLEN & LÜNNEMANN

BOSKOOP, HOLLAND

IRIS! IRIS! IRIS!

We have one of the largest collections of these glorious flowers in the country in 170 varieties, comprising some of the finest on earth. Send for prices.

The 25 cent Iris Manual for a two cent stamp to pay postage.

C. S. Harrison's Select Nursery

YORK, NEBRASKA

Do not let the accounts owing you remain longer unpaid. Send them to us at once. We are prompt, energetic, and reasonable, and can reach any point in the United States and Canada. **NATIONAL FLORISTS' BOARD OF TRADE**, 56 Pine St., New York.

10 - 2 - BUSINESS.

keep them as low as possible commensurate with first quality. **APPLE, PEAR, CHERRY, PLUM and ROSA CANINA**, from **DOORNBOSCH & SON**, Fruit Tree Seedling Specialists, Veendam, Holland. Get our quotations. **THE HORTICULTURAL CO., Sole Agents, WORCESTER, MASS.**

TO THE TRADE

The Commercial Nursery Co.

WINCHESTER, TENN.

offer for FALL 1912 and SPRING 1913

Peach, Plum, and one year old Apple Grafts, Shade Trees, Roses and Evergreens. Fine lot of June Buds peach—Carman Slappy, Greensboros, Hill, Bell of Ga., Elberta. Write for prices

Satsuma Orange and Pecans at our Branch Nursery
MONTICELLO, FLA.

Verkade Van Kleef

(W. VAN KLEEF, Jr.)

"Nova Nurseries" WADDINXVEEN, HOLLAND
Near Boskoop

EVERYTHING IN THE LINE OF HARDY NURSERY STOCK

Ask for "MY SILENT SALESMAN," it will interest you.

Nurseries at Boskoop and Waddinxveen



Surplus Stock

Prices
Right!

150,000 PEACH, all grades,
10,000 GRAFTED PECAN, 2 to 3 ft.,
10,000 JAPAN WALNUT, 2 to 3 ft.

SMITH BROS. - Concord, Ga.

PECAN TREES

Write us for prices of well grown vigorous pecan trees of the leading commercial varieties. We have them.

STANDARD PECAN CO.

H. S. WATSON, Manager. Monticello, Fla.

BOX STRAPS

AND CAR SEALS

WARD-DICKEY STEEL COMPANY

Manufacturers of Planished Sheet Steel
INDIAN HARBOR, IND.

You don't if you wait for the last bell to secure the **FRUIT TREE SEEDLING STOCKS** you need for next season. No use to wait for prices to go down; they wont, but we will

15,000,000 Forest Seedlings

ASH, BOX ELDER, CATALPA, ELM, SOFT MAPLE
AND HONEY LOCUST. COTTONWOOD AND
WILLOW IN RIVER PULLED SEEDLINGS,
WILLOW AND POPLAR, 1 yr. old
from Cuttings.

SHADE TREES IN CARLOAD LOTS

WRITE FOR PRICE LIST, OR SEND US YOUR WANT LIST

WHITING NURSERY CO.

Box 10

YANKTON, S. D.

The Josselyn Nursery Co.

FREDONIA, N. Y.

(Successors to George S. Josselyn)

OFFER

GRAPE VINES

GOOSEBERRIES

CURRANTS

in all leading varieties. Stock has made the strongest and most vigorous growth in years.

WRITE FOR PRICES

ORNAMENTAL STOCKS

NURSERIES
420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.
300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
400 varieties of Perennials.
800 varieties of New and Old Roses.

We Have No Agents.
Write direct to us and
ask for **WHOLESALE
CATALOGUES**

TRANSON BROS. & D. DAUVESSE'S NURSERIES,

16 Route d'Olivet

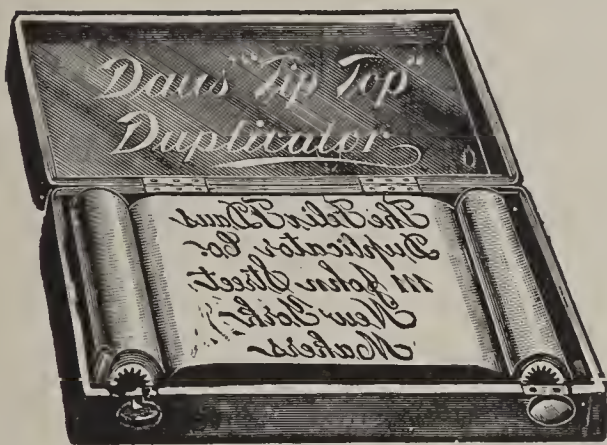
BARBIER and CO., Successors,

Orleans, France

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We mean a

Daus Tip Top Duplicator



with "Dausco" Oiled Linen Back negative roll, that ideal assistant, always ready when you want to quickly make 100 Copies from Pen Written and 50 Copies from Typewritten Original. Complete Duplicator costs \$5, but we don't want your money until you are satisfied that it is all right, so if you are interested just write to send it on 10 Days' Trial Without Deposit.

Felix A. G. Daus Duplicator Co. Daus Building, 111 John Street, New York

The Future Bedding Rose !!!

**"Mevrouw,
G. W. Van Gelderen"**

(Gloire de Dyon X Captain Christy)

A perfect hardy H. T. Rose; color creamy-rose, very free flowering, a strong grower, also easy to force. Ready for shipment after October 1, 1912.

V.G.'S
SPECIALTIES

Azaleas, Buxus, Conifers, Evergreens,
Magnolias, Paeonias, Rhododendrons,
Roses, Vines, etc. : : : : : : : :

Ask for our General Catalogue, and description and prices of our famous new Rose.

G. W. VAN GELDEREN
BOSKOOP, HOLLAND

English Nursery Stock

Extensive stock of *RHODODENDRONS*, English grown, hardy kinds a specialty. *These are specially grown for America.* Bushy, well-grown plants, budded, 1½ to 2 ft., 2 to 2½ ft., and a few kinds 2½ to 3 ft. *ANDROMEDA, AZALEA, KALMIAS, etc.*, a good stock. *HARDY CONIFERS*, a large stock. Low prices can be quoted on all Conifers. *ORNAMENTAL EVERGREEN TREES, FRUIT TREES*, trained and in pots. *TRANSPLANTED FOREST TREES, FRUIT TREE STOCKS, etc.*

ROSES, dwarf and standard—all leading kinds in quantity. *MANETTI STOCKS*, 1-yr., fine.

The stock is in excellent condition. *First grade stock only supplied.* Thirty years successful trading in the States. No agents. Write direct for wholesale catalogue.

Walter Charles Slocock
Goldsworth Nursery

Half an hour's rail from London by
L. & S. W. Ry., Main Southampton Line.

WOKING
Surrey, Eng.

When writing to Advertisers please mention The National Nurseryman.

September Brings Heavy Orders for Ornamentals== Is Your Stock Large Enough to Cover the Demand?

When the calls come for Deciduous Trees and Shrubs and Evergreens you want to be ready to meet them quick. We have a stock of trees that will make good anywhere and bring repeat orders when you furnish them to your trade.

The little ornamental trees in our nurseries get just as good care as our fruit trees—cultivating the blocks all through the season, pruning the trees as required, training them so they will grow and “make good” from the day they are transplanted. Our loamy soil makes the formation of a strong root system a sure thing—this means sturdy growth in after years.

Our stock of Deciduous trees includes Norway, Silver and Sugar Maples, Oriental Plane, Catalpa speciosa, California Poplar, American Elm, American Linden, Black Walnut.

The list of Evergreens is made up from Norway Spruce, Colorado Blue Spruce, Koster's Blue Spruce, American and Pyramidal Arborvitae, “Glory of Boskoop” Cypress, Firs, Pines, and Junipers.

In Fruit Trees the comprehensive list below gives an idea of our ability to fill large or small orders. If your needs are not included, write us and we will tell you whether we can supply you or not.

APPLES

One Year Budded

American Golden Russett.....	1200
Alexander	1200
Baldwin	27000
Ben Davis	7000
Benoni	250
Belleflower	300
Bismarck	100
Coffelt Beauty	100
Cooper's Market	100
Carthage	150
Chenango Strawberry	225
Dominie	250
Duchess	6500
Delicious	275
Ensee	300
Early Colton	125
Early Harvest	3000
Early Strawberry	250
Fall Pippin	250
Fanny	100
Fallowater	750
Fourth of July	1000
Fameuse	1200
Grimes' Golden	10000
Gravenstein	2500
Golden Beauty	250
Gano	6000
Ingram	200
Jeffries	100
Jonathan	7000
Kennard's Choice	150
King	2500
Longfield	100
Lankford	75
Lawver	100
Limberville	150
Myrick	275
Missouri Pippin	300
Mammoth Black Twig	12000
Mann	100
McIntosh Red	10000
Maiden's Blush	650
Nero	1400
Northern Spy	3000
N. W. Greening	1500
Porter	100
Pewaukee	80
Paradise Winter Sweet	1100
Rome Beauty	16000
Rawles Janet	150
Red Astrachan	4000
Rolfe	175
Red June	250
R. I. Greening	1200
Rambo	1200
Stayman's Winesap	60000
Starr	2200
Smoke House	1000
Smith's Cider	250
Scott's Winter	200
Salome	150
Springdale	150
Stark	3000
Sweet Bough	1000
Spitzenburg	1250
Tallman's Sweet	1000
Wealthy	8000
Walbridge	250
Winesap	16000
Wolf River	3000
William's Early Red	3000
Winter Banana	3500
Wagner	900
York Imperial	60000
Yellow Transparent	16000

CRAB APPLES

Hyslop	275
Martha Crab	250
Transcendent	2000

APPLES

Two Year

Aiken	50
A. G. Russett	400
Arkansas Black	200
Apple of Commerce	40



Tying and Pruning Blue Spruce at Harrison's Nurseries

APPLES—Continued

Baldwin	12000
Ben Davis	4000
Bismarck	30
Benoni	40
C. R. June	400
Carthage	40
Coffelt	25
Cooper's Market	50
Canada Red	25
Chenango	50
Dutchess	2500
Dominie	50
Early Strawberry	200
Early Harvest	2500
Early Melon	40
Fallowater	500
Fanny	20
Flora Bell	40
Golden Sweet	150
Gravenstein	2000
Hubbardston	1000
Ingram	40
Jeffries	40
King	150
Kinnards	40
Lawver	150
Longfield	30
Late Raspberry	45
Jonathan	1250
Missouri Pippin	900
Mann	400
Myrick	50
Nero	1500
N. W. Greening	2500
Opalescent	75
P. W. Sweet	450
Paynes	40
Pewaukee	50
Rambo	500
R. I. Greening	2500
Roman Stem	30
Red Astrachan	4000
Sweet Bough	50
Smith Cider	400
Stark	1500
Spitzenburg	2500
Salome	25
Senator	35
Sutton Beauty	25

APPLES—Continued

Springdale	30
Townsend	40
Virginia Beauty	50
Walbridge	200
Wealthy	2500
Wolf River	1250
Winesap	4000
Winter Banana	750
Yellow Transparent	15000
Yellow Belleflower	500
York Imperial	25000

CRAB APPLES

Golden Beauty	1000
Hyslop	750
Transcendent	1000

QUINCES

Champion, 2-3 ft.	500
Orange, 2-3 ft.	500

CHERRIES

Two Year

Baldwin	1000
Black Tartarian	1500
Early Richmond	10000
Gov. Wood	1000
Montmorency	4000
Napoleon	1000
Schmidt	1000
Windsor	1000
Yellow Spanish	1000

PEACHES

One Year from Bud

Ark. Beauty	300
Alexander	200
Admiral Dewey	200
Belle of Georgia	25000
Beer Smock	2500
Bilyeu's Late	2500
Bray's R. R.	250
Crosby	200
Connett's So. Ey.	200
Captain Ede	200
Cornelia	50
Chinese Cling	250
Carman	15000

PEACHES—Continued

Chair's Choice	5000
Champion	5000
Crawford Early	2500
Crawford Late	5500
Elberta	70000
Edgemont Beauty	500
Engles Mammoth	1500
Ford's Late White	1000
Frances	1500
Fitzgerald	1500
Poster	500
Fox Seedling	3000
Geary's Hold On	2000
Gold Drop	250
Globe	300
Greensboro	2500
Heiley	1500
Harrison Cling	250
Iron Mountain	3000
Jackson Cling	200
Klondyke	500
Krummel's Oct.	950
Kalamazoo	1250
Levy's Late	200
Late Elberta	250
McCollister	200
Miss Lola	175
Mountain Rose	2000
Moore's Favorite	1500
Mamie Ross	1000
Mayflower	1400
Matthew's Beauty	200
Marshall	200
New Prolific	1000
Niagara	1500
Old Nixon Free	500
Picquett's Late	250
Prize	250
Reeve's Favorite	2500
Ray	25000
Sneed	200
Sunrise Cling	250
Stinson's Oct.	250
Salway	6000
Stump	3500
Stephen's Rarripe	1300
Slappey	1500
Triumph	150
Wilkin's Cling	1100

Harrison's Nurseries

J. G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



THE NATIONAL NURSERYMAN



OCTOBER, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.

MONROE, MICH.

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SPIRAEA VAN HOUTTEI
by the thousand.

Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

APPLE AND JAPAN PEAR SEEDLINGS

We are ready to quote prices for future delivery.

*Large line of General Nursery Stock of superior
quality for Wholesale Trade.*

CORRESPONDENCE AND INSPECTION INVITED

THE JEWELL NURSERY CO.

LAKE CITY, MINNESOTA

Wholesale Nurserymen

Established 1868

1500 Acres

SPECIALTIES FOR FALL 1912

NORWAY AND CAROLINA POPLAR

2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8, 8 to 10, 10 to 12 ft.

BOX ELDER, ASH, ELM SEEDLINGS All Sizes.

AMERICAN BASSWOOD AND SOFT MAPLE TREES

100,000 CURRANTS, Red and White.

75,000 MCINTOSH, JONATHAN, BELLFLOWER,

WINESAP, Etc., 2-year, fine stock.

THREE YEAR APPLE in all Hardy Varieties.

THREE YEAR CRAB

SNOWBALL

YELLOW DOGWOOD

HYDRANGEA

WRITE FOR SPECIAL PRICES.
LET US PRICE YOUR GENERAL WANT LIST.

Now is the time to place your orders for
Direct Importations

from European Nursery Centers

FRENCH FRUIT STOCKS

Apple, Pear, Myrobolan, Mahaleb, Maz-
 zard Seedlings, Manetti, Multiflora and
 Quince stocks. Also full line of Orna-
 mental for lining out, from Vincent Le-
 breton's Nurseries, Angers. Best pack-
 ing and grading. December or February
 shipment from France.

Boskoop, Holland, Nursery Stock

Boxwood (pyramids, bushes, standards,
 ball-shape, etc). Roses, Tree Roses, Rho-
 dodendrons, Azaleas, Magnolias, Koster
 Blue Spruce, Evergreens, Hydrangea P.
 G., etc., etc., from Schaum & Van Tol,
 Boskoop.

DECIDUOUS TREES

Norway and Schwedler Maples, Tillas,
 Elms, Chestnuts, Oaks, Planes, Thorns,
 etc., etc., etc., straight stems and good roots,
 careful selection, best packing from Union
 Nurseries, Oudenbosch, Holland.

Besides representing the above firms
 as Sole American Agents, we import to
 order

FROM JAPAN AND ENGLAND

English Manetti, Gooseberries 2 and 3-yr.
 (Whinham Industry, Whitesmith, etc.),
 Japanese Nursery Stock and Lilies.

BAY TREES. Standards, Pyramids and
 all shapes from Belgium, Fall or Spring
 shipment.

RAFFIA. Red Star Brand and four
 other grades; also dyed Raffia in 20 colors.

WRITE US for catalogs, special lists,
 etc., stating the class of stock you are
 interested in.

SHIPPING. We have our own Custom
 House Dept., with shipping connections
 at Havre, Hamburg, Rotterdam, Antwerp,
 Southampton, etc.

McHutchison & Co.

17 Murray St.
 New York

The Import
 House

SIMPSON

is the name of the men who grow the finest

CHERRY

that can be produced by suitable soil, climate and
 expert knowledge.

Take a look at the stock or ask for a sample and
 be convinced of the extra quality of their

TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year

AMERICANA PLUM ON PLUM

COMPASS CHERRY ON PLUM

H.M. Simpson & Sons

VINCENNES, INDIANA

For Winter and Spring Orders

**WE OFFER THE FOLLOWING FROM
 OUR MAC CLENNEY NURSERY . . .**

4000 **Mulberries**, mostly of Hicks variety, smooth and free
 from blight.

15000 **Figs**, mostly of the Celeste and Lemon varieties.

20000 **Peach**, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.

25000 **Plum on Plum**, Abundance, Burbank, Wickson, Red
 June, Gonzalez, and other leading sorts. Sizes $\frac{1}{2}$, $\frac{5}{8}$,
 $\frac{3}{4}$ and 1 inch.

10000 **Roses**, Teas, Hybrid Teas and Climbers, all grafted very
 low on Manetti roots. Field grown.

6000 **Biota Aurea Nana**, sizes 18 inches up.

10000 **Biotas and other Conifers**, 12 inches and up. Conifers
 can be balled or shipped with naked roots.

25000 **Chinese Arborvitae Seedlings**, 2 and 3 year, 6 inch to
 3 ft. sizes.

5000 **Muscadine Grapes**.

20000 **Trellis Varieties Grapes**.

70000 **Camphor Trees**, sizes 1 to 3 ft.

3000 **Pot Grown Eucalyptus**, sizes 3 to 5 ft.

4000 **Oriental Plane**, sizes from 4 to 12 feet.

3000 **Texas Umbrella**, sizes from 4 to 8 feet.

2000 **Oleander**. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.
 Could also supply limited quantities of general list of Fruit
 and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

The Griffing Brothers Company

JACKSONVILLE, FLORIDA

NURSEYRMEN AND FLORISTS

looking for stock can find largest assortment in the United States at the

Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time
desired; switch from N. Y. C. lines direct into our packing house; can load without
exposure. Unsurpassed facilities for handling orders large or small.

== CATALOGS AND PRICE LISTS FREE ==



BARBERRY THUNBERGII AND SPIRÆA VAN HOUTTE

A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,
CONCORD and other GRAPES

OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

FOR FALL, 1912

AMERICAN

ELMS...

Norway Maples

SPLENDID TREES

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

TREE LILACS

Grown as STANDARDS with strong, straight stems and well-branched, well-balanced tops; forty varieties, single and double, all shades from purest white to darkest purple. A profitable *specialty* for agency and catalog houses.

J. & P. Tree Hydrangeas were the first home-grown standards on the market. Our **Tree Lilacs** are becoming even more popular.

Electros free for use in advertising. Special prices to large buyers of TREE LILACS.

Other shrubs also grown as STANDARDS, like **Snowballs**, **Weigelias**, **Spireas**, **Forsythias**—very special stuff for high-class retail trade. We, ourselves, sell at wholesale only and to nurserymen and florists exclusively.

Jackson & Perkins Company

Growers of the J. & P. Specialties
Sold to the Trade only

NEWARK, NEW YORK

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It costs more to produce such, but it's *worth* it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our **Biotas**—**Aurea Nana**, **Aurea Conspicua**, and **Japonica Filiformis** (see illustration); **Retinospora**, **Thuya**, and **Juniper**—all in popular sizes for the trade.

Our **Deciduous Shrubs** include **Exochorda**, **Lilac**, **Spirea**, **Althaea**, **Deutzia**, **Philadelphus**, and a very choice stock of **Teas' Weeping Mulberry**.

Broad-leaved Evergreens—**Azalea Indica** (Home-grown Plants) **Magnolia Fuscata**, **Aucuba**, **Ligustrum**, and **English Laurel**. Among our fruits, we direct particular attention to our clean, thrifty **Peach Trees**, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.
INCORPORATED

Fruitland Nurseries
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.

CONIFERS
BROAD-LEAVED
EVERGREENS
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The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

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The uses of evergreens are multiplying rapidly. Instead of ugly fences, people in town and country are planting "live fences" of evergreens. Farmers who used to plant one or two Arborvitæ, for ornament, now have long hedges of them for windbreaks. You can sell more evergreens if you have the right stock. The one *best* way to start is to buy

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1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
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Willis Nurseries

OFFER A GENERAL ASSORTMENT
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Apple, Peach
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Apple Seedlings
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Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Fall of 1912 and Spring of 1913 in large quantities as usual:

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CHERRIES—On Mahaleb. One and two years. Ea. Richmond, Dychouse, Montmorency, Wragg, Royal Duke, in small supply.
PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.
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PRIVET—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.
PECAN SEEDLINGS—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

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World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,
in several hundred
kinds and varieties

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RHODODENDRONS, Hardy,
ENGLISH HYBRIDS,
Maximum and Catawbiense

BOXWOOD, in all shapes,
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FLOWERING TREES

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HARDY TRAILING VINES
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FRUIT TREES,
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DWARF and TRAINED

SMALL FRUITS, in all
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NUT TREES, profitable
kinds

OLD-FASHIONED, Hardy
FLOWERING PLANTS, in
thousands of kinds and
varieties

PAEONIAS, IRIS, PHLOX
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and HARDY GRASSES

KITCHEN
HERBS and ROOTS

RUTHERFORD PARK LAWN
GRASS SEED

AUTUMN BULBS, Dutch,
French and Japanese kinds

Interior and Exterior
DECORATIVE PLANTS, in
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PLANT TUBS, in all shapes and
sizes. Ask for special list

VISITORS to our nurseries
are always welcome

SEND IN YOUR LISTS FOR
QUOTATIONS

Nurserymen, Florists and Planters
RUTHERFORD, N. J.

Fruit Seeds and Seedlings

We offer a complete list of FRUIT SEEDS and SEEDLINGS this year. Send for a copy of our list showing varieties, sizes and prices.

Tree and Shrub Seeds

Our complete price list of DECIDUOUS and EVERGREEN TREE and SHRUB SEEDS is now ready. This list will interest every Nurseryman. It contains a full list of varieties and prices. A copy will be sent on request.

OUR WHOLESALE TRADE LIST OF
HARDY ORNAMENTAL NURSERY
STOCK FOR FALL 1912 WILL BE
READY ABOUT SEPTEMBER 15TH.
BE SURE YOU GET A COPY.

THOMAS MEEHAN & SONS

WHOLESALE NURSERYMEN AND SEEDSMEN

DRESHER, PA.

BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings

Shade and Ornamental Trees

IN LARGE QUANTITY

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Over a million plants in one and two year old grades

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To meet the fast increasing demand for this popular hedge plant we have been growing a very large supply.

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Plant for Profit

Sure Money-Maker

Our General Line of Nursery Stock is most complete, including Fruits of all kinds, Evergreens, Shrubs, Etc.

FALL TRADE LIST IS NOW OUT. IF YOU HAVEN'T A COPY SEND FOR ONE

C. R. BURR & CO.

Growers of Fine Nursery Stock MANCHESTER, CONN.

FOREST TREES FRUIT STOCKS

Shipments of over 200 Million of Trees Annually

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Largest Forest Tree Nurseries in Europe.

Please write for Catalogue and Forest Planter's Guide to our American Agent:

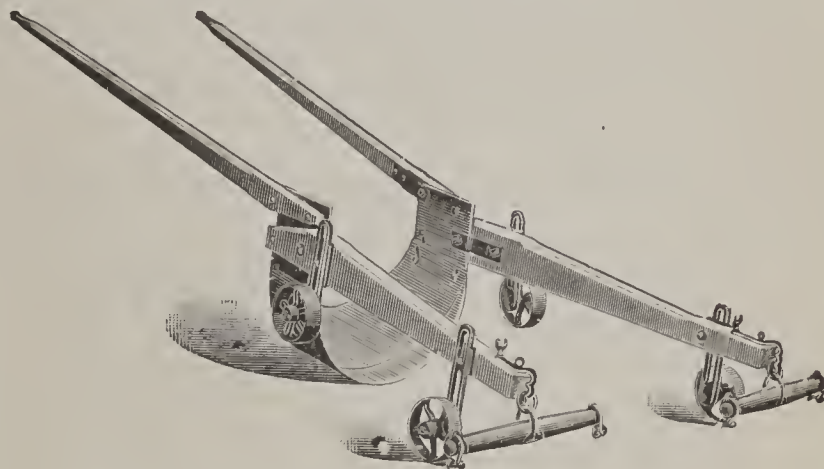
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1857 - 1912

BRAGG'S COMMON SENSE TREE DIGGER

REPAIRS ALWAYS ON HAND. SEND FOR CATALOGUE



Digger gets all the roots at the rate of 20 to 40 thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Have you seen and examined the quality and finish of our

Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

The Denney Tag Co.

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35TH YEAR
Pan Handle Nurseries

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
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Cherry	Sycamores	California Privet
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Currant	Hydrangea	Catalpa Seedlings
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Small Fruits	Syringaeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

J. K. HENBY & SON
GREENFIELD, IND.

TREE SEEDS

FRESH and NATIVE GROWN

WRITE FOR PRICES AND PLACE YOUR ORDERS EARLY

THE
North-Eastern Forestry Co.
NEW HAVEN, CONNECTICUT

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
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Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

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GRADE



LARGE
VARIETY

Correspondence solicited. Price list upon request.

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South Framingham, Mass.

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Peach Trees in car lots

NORWAY MAPLE
SILVER MAPLE

CALIFORNIA PRIVET,
1 year

325,000 APPLE, 1 year, grafts and buds,
in COMMERCIAL VARIETIES

The Greenbrier Nursery Co., Inc.
Greenbrier, Tenn.

SCARFF'S PLANTS

equal to any
on the market

Small Fruit Plants our specialty for 25 years. 100,000 Transplanted Raspberry, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

W. N. SCARFF

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FOREST TREES

SEEDLINGS AND TRANSPLANTS

in quantities for retimbering or lining out; healthy stocks, from the very extensive and well kept Wholesale Nurseries of

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Small Fruit Plants for the Nursery Trade, Fall 1912

Blackberry Rootcutting Plants, Eldorado, Erie, Ohmer, Rathbun. Raspberry, all leading varieties. Houghton Gooseberry Plants. Two hundred thousand Gooseberry Layer Plants. Asparagus, one, two and three year roots. One hundred thousand Rhubarb, one and two year roots, also divided. Horseradish Sets, etc. Write for Price List. P. D. BERRY, Dayton, Ohio

That Letter About Your Catalog —Get It in the Mail Today!



HOUGHT about writing it, off and on, for two or three months past, haven't you?

And, if you keep putting it off, the writing will get done too late in the season for you to secure the kind of catalog you have in mind.

The first thing you know Election Day will be here, then Thanksgiving, and, before you realize it, Christmas will have come and gone—and pretty early in the new year you'll need catalogs.

For delivery in January, a catalog made the McFarland way must be started in October—the firms that issue the books that do the big business in plants, shrubs and trees began work on theirs months ago.

Of course, you want a McFarland catalog. Maybe you've not yet made up your mind to get one. Don't delay the decision a minute longer or you'll be too late; and, if you fail to secure a McFarland Book this year, you'll do less business than you are entitled to.

THE McFARLAND ORGANIZATIONS

MOUNT PLEASANT PRESS : HARRISBURG, PENNA.

J. Horace McFarland Company
Constructors of Catalogs

The McFarland Publicity Service
Builders of Business

Our Business Is to Increase Yours Use This Blank and Find Out How!

WE'VE made good, time and again, on the proposition so to spend the same amounts for advertising, catalogs, follow-up and postage that a firm had been spending as to produce a considerably larger volume of business. If you'd like to know whether we will undertake to do as well for you, fill out and return us this blank.

INFORMATION BLANK FOR THE McFARLAND PUBLICITY SERVICE HARRISBURG, PA.

Name of Firm _____

Street No. _____

City _____

State _____

Business _____

How many names of actual buyers are on the books? _____

About how many names of persons who have received
one or more catalogs, but have never bought? _____

How much advertising is done yearly? _____

In what class of mediums? _____

How many inquiries is the yearly average? _____

How many catalogues are issued each year? _____

How many catalogues are mailed each year? _____

What size, how many pages and average cost? _____

What system of follow-up is used? _____

How much is expended for the follow-up material? _____

What is the annual postage bill on catalogs? _____

What is the annual postage bill on follow-up? _____

Total amount expended for catalogs, advertisements,
booklets, follow-ups, designs and engravings? _____

NOTE.—It will be desirable for you to send under separate cover samples of
your catalogues, advertisements, follow-ups, etc.



CHARLES L. YATES

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., OCTOBER, 1912

No. 10

CHARLES L. YATES

Charles L. Yates, Secretary, Treasurer and Business Manager of the NATIONAL NURSERYMAN and well known in business and political circles in Rochester, N. Y., died suddenly at his home No. 201 Rugby Ave., on Wednesday evening, September 4th, at nine o'clock, of acute indigestion, contracted on an automobile trip with his family on the Monday previous.

When he returned from the trip he was not feeling well, but his condition was not considered serious until he had a sudden turn for the worse on Wednesday night, and died almost before medical assistance could reach him.

His funeral took place from his late residence on Saturday afternoon, September 7th, and was attended by representative nurserymen from all parts of the country and other business, political and masonic friends.

Mr. Yates was born at Pigeon Hill, Canada, on August 11th, 1847, and received his education in the Public Schools. In 1868 at the age of twenty-one (21) he moved to Lowell, Mass., when he engaged in the wholesale commission business. After six years he went to San Francisco and became interested in quick silver mines in the St. Helena Mountains. Upon his return to the East he located in Waltham, Mass., and engaged in the nursery business for four years as local salesman for the Geo. A. Stone Nursery Co., of Rochester. From there he moved to Philadelphia and became a partner in the Stone Co.

In 1885 he severed his connection with the Geo. A. Stone Co., and moved to Rochester, N. Y., where he started the nursery business under his own name and was very successful.

In 1893 he commenced the publication of the NATIONAL NURSERYMAN, which was later adopted as the official organ of the American Association of Nurserymen. In 1902 the business was incorporated under the title of the "National Nurseryman Publishing Co.," Mr. Yates acting as secretary, treasurer and business manager. In 1898 he was elected treasurer of the American Association of Nurserymen, which office he held continuously up to the present time.

Mr. Yates was interested in several business enterprises in Rochester, his principal connection being with the Pulver Chocolate and Chiele Manufacturing Co., of which he was President and Manager. At the time he was elected president of the company it was heavily in debt and no dividends had been declared for several years. Under his able management, the company soon paid up its outstanding debts, built up a surplus in its treasury and paid up nearly all of its back dividends and is now in a most prosperous condition.

For the past ten years he has been a Director of the Union Trust Co., of Rochester and a vestryman of the Trinity Church for eighteen years.

In political circles Mr. Yates was always a staunch Republican and was a resident of the Tenth Ward for fourteen (14) years. As Supervisor he served his ward with great credit; he was Chairman of the Executive Committee of the Supervisor and Ex-Supervisors' Association, a member of the Rochester Whist Club, the Protectives and the Rochester Ad Club, and a prominent Mason, being a Charter Member and Second Master of Corinthian Temple Lodge, No. 805, F. & A. M.; was at one time High Priest of Ionic Chapter, No. 210, R. A. M., Generalissimo in Cryene Commandry, 39 K. T., and a member of Damascus Temple, Nobles of the Mystic Shrine, and Viceroy in the Knights of the Red Cross, Order of Constantine.

Mr. Yates leaves a widow and one son.

Relative to the death of our friend, Charlie Yates, it opens up again the grief which we all felt when the news of his death was announced, and that grief makes it difficult for me to say all that is in my heart to say of his many good qualities.

Every member of the American Association knew him, and every member loved him, and nothing that I can say will add to their knowledge of his sterling worth, or lessen their grief in the fact that they will see him no more.

A good, straightforward business man, warm hearted, generous, a good friend and a good fellow, what more can be said? We shall miss him sorely every year that we gather together in annual convention, and more frequently will he be missed and mourned by those of us who were his townsmen and neighbors.

WM. PITKIN.

It is with the profoundest regret that I learn from your letter of September 7th of the death of Mr. C. L. Yates of Rochester.

I valued his intimate friendship very highly and many were the good times we have enjoyed together.

He was a man of high ideals, of good moral character and incapable of insincerity and his very untimely death will be felt keenly not only by his relatives and friends, but by the nurserymen at large for he was a figure of prominence at all conventions and his geniality will be missed by all who have ever come in contact with him.

CHARLES A. ILGENFRITZ.

I take this method of expressing my great surprise and sincere sorrow upon learning of the recent death of Mr. C. L. Yates secretary of your organization, and treasurer of the American Association of Nurserymen.

I have had the pleasure of knowing Mr. Yates intimately for many years, and have always regarded him as one of "God's Noblemen."

A man with a big heart, the goodness of which was always manifested by the genial side with which he invariably met everyone.

He has served the association long, faithfully, and efficiently as its treasurer during which time he has made many lasting friends by whom he will be greatly missed.

Truly "A Prince has fallen!" "Peace unto his ashes."
J. W. HILL.

Think I never was much more surprised and shocked than when on return from a trip I found telegram and letter announcing the death of that prince of good fellows, C. L. Yates. Had met him but a short time before and thought he was in the prime of life and would be able to extend the glad hand to his visiting friends for many years to come. If he was not always happy, he certainly had the happy faculty of seeming to be. It will always be a glad remembrance for me, that for many years I was permitted to know him as a friend, and to recognize his sterling worth as an associate in our convention work, and business deals.

J. H. DAYTON.

I was very much surprised and shocked on receiving word informing me of the death of C. L. Yates of Rochester, N. Y. When I saw him at our Convention last June he seemed to be in perfect health, and his bright, sunny disposition always brimming over with fun made him hosts of friends who were always delighted to be in his company. I do not know of any member of the American Nurserymen's Association who will be missed from our annual meetings as much as C. L. Yates.

ABNER HOOPES.

We note with extreme sorrow the very sudden death of your Mr. C. L. Yates, and wish to extend herewith our most sincere sympathy to the members of his family and co-workers of the NATIONAL NURSERYMAN.

THE ALLEN-BAILEY TAG CO.,
J. A. BAILEY.

I was greatly shocked and grieved to learn of Mr. Yates' untimely death. He was a warm friend and I looked upon him as one of my very best friends.

J. B. MOREY.

It is with exceeding regret that I have learned of the recent death of Mr. Chas. L. Yates. As a business man Mr. Yates always stood for all that was efficient and progressive. His loss will be keenly felt by all those who have relied on his

thorough and faithful work. As a friend he will be mourned by many who have long known him as a warm, genial hearted, faithful companion.

L. A. BERCKMANS.

The news of the death of Mr. Yates came as a great shock and brought a deep sense of personal loss. My acquaintance with him runs back some sixteen years and the yearly meetings with him at the conventions of the Nurserymen's Association and on numerous other occasions led to an intimacy that brought me much pleasure and will be one of my most cherished recollections.

A genial and whole-souled companion, always ready to serve his friends in every possible way, his passing makes a void that will not easily be filled and his cheerful presence will not soon be forgotten.

JOHN C. CHASE.

Today the NATIONAL NURSERYMAN received announcing the passing on of Chas. L. Yates. No convention was complete without Chas. Yates. A genial old soul, "hale fellow, well met." The American nurserymen are indebted to Mr. Yates very largely for the success of the NATIONAL NURSERYMAN, which is synonymous of their success. He will be missed.

W. P. STARK.

NATIONAL NURSERYMAN:

I knew Prof. Craig very well and wish to add my testimony to the charm of his personality and to the great worth of his character and services. I did not know Mr. Yates, but this double blow must be very hard. I regret also the accident to Mr. Meehan. I sincerely trust that the NATIONAL NURSERYMAN will recover from this unparalleled series of misfortunes.

Yours with best wishes,

WILHELM MILLER,

Editor *The Garden Magazine* and Horticultural Editor of *Country Life in America*.

NURSERYMEN SHOULD SECURE A COPY

A very handy Bulletin, No. 39 has been issued by the Department of Agriculture at Albany, N. Y., giving a synopsis of the laws and regulations of the several states and Canada relative to the inspection, certification and transportation of nursery stock.

LIABILITY FOR MISROUTING

Interstate carriers are responsible in damages to shippers for loss to the latter through the misrouting of shipments. This principle was laid down by the Interstate Commerce Commission today in deciding the case of W. C. Sterling & Co., of Monroe, Mich., against the Michigan Central Railroad, and other carriers. The decision practically reverses a previous holding of the commission that if the shipper accepted a shipment that had been misrouted in violation of his specific instructions, he would be obliged to stand any loss thereby sustained.

In the case decided today the carriers, by misrouting the shipment, forced the shipper to pay drayage charges which would not have accrued.—*Farm and Orchard*.

WHAT E. C. POMEROY SAYS ABOUT THE ENGLISH WALNUT

Owners of country estates and orchardists throughout the United States are just now devoting more attention to the culture of the English or Persian walnut than to any other industry. In fact, horticulturists everywhere are tremendously interested in the propagation of this delicious fruit, both from a commercial and an æsthetic point of view.

For many years the English walnut has been cultivated with more than ordinary success in California, but only very recently has a sufficiently hardy variety been found to withstand the severe winters of the northern, eastern and southeastern states. The circumstances pertaining to the

steadily, making surprising growths each year until now they stand fully 50 feet high, with a spread to their branches of 40 to 45 feet, and yielding nuts of the finest quality and in great abundance. During the 35 years of growth, where the temperature has frequently descended far below zero, they have not had a single setback, maturing even earlier than the black walnut or the oak.

The elder Pomeroy's remarkable success has attracted the attention of nut culturists, horticulturists and progressive farmers in all parts of this country and Europe. Nut specialists from California came East and examined the



ENGLISH WALNUT TREES PLANTED 40 TO 60 FEET APART. SMALL FRUIT TREES ARE OFTEN USED AS FILLERS.

discovery of an unusually hardy variety, the Pomeroy English walnut, may be related as follows:

The late Norman Pomeroy of Lockport, N. Y., while attending the Centennial Exposition in Philadelphia in 1876, noticed a species of tree totally new to him. On investigation, he found it to be an English walnut tree of surprising beauty. It was the fall of the year and the ground underneath the tree was covered with nuts. These proved to be equal, if not superior, to the taste, to any of the imported varieties with which Mr. Pomeroy was familiar.

Being thoroughly versed in arboriculture, Mr. Pomeroy propagated young trees from this acclimated variety, feeling certain that from these he would ultimately obtain an English walnut of superior hardiness, capable of resisting the rigors of almost any climate.

He planted these young trees about his residence in Niagara County, N. Y., in the spring of 1877 and they grew

Pomeroy trees, and were well satisfied that a hardy variety for the colder states had at last been found.

Realizing the value of his father's discovery, Mr. E. C. Pomeroy, a few years ago, set out several orchards of the variety which had thriven so well, and all these trees are now in a fine state of healthy growth, and are known by nut growers all over the country. Only the other day a prominent physician in Atlantic City, just returned from a tour of Austria, told Mr. Pomeroy of the fame which his orchards enjoyed abroad. As an instance of this, the doctor mentioned the name of an Austrian nut grower, who declared the Pomeroy nut to be the very best variety in the world. These nuts do not become rancid in warm weather, having been kept for several years in perfect condition, without cold storage.

So profitable has the culture of the English walnut in the Eastern and Northern states become, that owners of farms

and suburban tracts are beginning to set out large orchards, in preparation for the immense demand that is already being shown for this most edible of all nuts.

It is only a few years ago that the cultivation of the English walnuts for the market started in California, and today they are shipped from that state in car and train loads. To show, however, that the supply does not begin to meet the demand in this country, it may be stated that the United States consumes more than 50,000,000 pounds of English walnuts a year, and that about 27,000,000 pounds of these have to be imported every year. And when it is known that the price is steadily advancing, it will very readily be seen that the possibilities of commercial success are unusually great.

In California the nut industry is rivaling that of the orange; and even now, there are more dollars worth of nuts shipped from the state per year than there are of oranges. This statement is meant to include all varieties of nuts, although the English walnut figures largest in the proportion.

As to planting and cultivating, English walnut trees seem to require no particular soil, but should not be set out where it is low and wet. The trees should be planted 40 to 50 feet apart each way. A cultivated crop, such as corn or potatoes, with small fruit trees for fillers, can be made to yield an income for the brief period, comparatively, before the walnuts begin to bear. The pruning should be done between fall and spring, only such branches as would interfere with cultivation being removed.

In planting on the lawn the ground about the base of the tree should be kept spaded for three feet in circumference, and after the first year some well-rotted manure should be worked into the soil around the tree. No cultivating should be done after the first of August, as it would encourage further growth, and from then until winter the annual growth of wood is ripening and hardening.

The English walnut makes comparatively no litter, has a light, clean bark, and bears a heavy foliage with a rich, glossy leaf. They are almost immune from insect pests, a certain alkali sap which they possess serving to drive away the parasites which are so ruinous to the chestnut and nearly all other fruit trees.

In the English walnut at its best, the male and female blossoms mature at the same time, insuring perfect fertilization. Under favorable circumstances, the trees will bear nuts three to five years from transplanting and increase in

yield yearly. As a food, nuts are becoming less a luxury and more a staple article of diet. Their value is being recognized and they are being used more and more as a substitute for meat, one pound of walnut meat being said to equal eight pounds of steak, in nutriment.

Most growers have found that two to four-year-old trees are most readily transplanted. At this age most of their growth has been in roots, and removal causes them to throw out additional roots, and thus give increased vigor to the tree. Then again, the smaller the tree, the more safely may it be packed and shipped to its destination.

The Eastern grower has many advantages over his rival of the West. First of all, there is the consideration of freight charges, which on a carload from California amounts to such a sum that added to the cost of the nut, naturally increases the price per pound several cents over the variety grown in the East and placed in an Eastern Market.

A California grower of English walnuts who recently visited an orchard in Western New York declared the specimens which he saw there to be "the very finest I have ever seen. You have a better flavored nut and you have proved beyond a doubt that the variety is thrifty and hardy," were his exact words. This same grower said that his few acres of young California trees gave him in 1911 a crop which he sold for \$10,000.

NOTICE TO SUBSCRIBERS

We shall be glad to try and identify any plant sent to us. If we do not know it we will tell you so candidly.

Specimens should have flowers and fruit if at all possible and it should be stated if the specimen is from a tree, shrub or herb, also if growing wild and where.

Information as to method of propagation or culture of any particular plant will be gladly given to subscribers, through the columns of THE NATIONAL NURSERYMAN. If we cannot give you the information ourselves, we can at least advise you where you can obtain it. In other words, we wish to establish a bureau of information on horticultural subjects for the benefit of our subscribers that will be active and helpful.

Address communications to Editor, THE NATIONAL NURSERYMAN, Flourtown, Penna.

The Eleventh Annual Convention of The National Nut Growers' Association will be held at Gulfport, Miss., October 30-31 and November 1st, 1912.



BEARING SIX YEAR OLD WALNUT TREE

JAMES McHUTCHISON WRITES OF HIS VISIT TO EUROPEAN NURSERIES

Perhaps the most interesting place for nurserymen Mr. Meehan and myself visited on our recent European tour was Boskoop, Holland, where in some of the older nurseries trees have been growing on the same land for the past 200 years. The land is constantly being removed with the shipments of balled plants and is renewed by the dredgings from the adjoining sub-canals and fertilized partly from the aquatic plants which cover them. We were there four days, but were able to visit only a few of the 600 to 700 growers.

There are no other industries in Boskoop, except those subsidiary to the nursery business. The whole country is below sea level, the water level of the sub-canals are regulated by pumping stations. The large canal which carries an enormous amount of commerce and runs between Rotterdam and Amsterdam runs right through the center of Boskoop and provides rapid and cheap transportation to these ports. All stock is looking in fine shape, Roses, Tree Roses, Rhododendrons and Koster Blue Spruce are in large supply and cheap, but Boxwood, Azalea Mollis, Hydrangea p. g., and Baby Rambler are scarce and cannot now be bought at less than about 20% over spring prices.

Another very interesting nursery center is Oudembosch in the south of Holland. They have no canals there. The land, unlike that of Boskoop, is sandy and seems peculiarly suitable to the growing of Maples, Tiliacs, Planes, Oaks and similar growing upright deciduous trees, requiring straight stems. They have a long growing season, from March to November, and no really hot weather in between, a regular and frequent rainfall. In one of the outlying sections we saw Norway Maples which had made 6 ft. of this year's growth up to Aug. 1st, the leaves measured 12 inches across (o. k'd by Meehan). At Union Nurseries we saw a solid block of Norway Maples all running from 6 to 10 ft. The largest block of one variety we saw anywhere in Europe.

In France we took an automobile ride from Angers down the valley of the river Loire, 20 miles, to inspect the fruit stocks. This section is called "The Garden of France" and is rightly named. The land is altogether in small holdings and owned by the same family for generations and money will hardly buy it. Most of the owners, though wealthy men as a rule, work themselves in the fields 12 or 14 hours a day and their wives and families work with them. It was these small farmers who paid in two years, the war indemnity of two billions of francs which Bismarck imposed on France with the object of crushing the nation and preventing another war.

This land is mostly lower than high water level of the river. It was dammed back by one of the Louis' about 200 years ago. The extremely fertile soil, together with the underlying water, and the warm summer makes the condition ideal for growing seedlings of uniform caliper each season, conditions which I doubt can be found elsewhere. The seedlings are looking exceptionally fine this season. We saw blocks of one year transplanted apples and pears standing evenly in the rows without a blank, every stock of which could be shipped as seven to twelve mm. without any grading, the same could be said of Mahalebs, Myrobolans and Maz-

zards five to nine mm. There are very few smaller grades and practically everything in fruit stocks is sold for this season excepting apples and mahalebs.

We also visited Orleans, Ghent, Aalsmeer and many other places. Everywhere we found the nurseries quite clean of insect pests, especially in France and everywhere was a desire to comply with American Entomological laws, wherever practicable.

JAPANESE MAPLES

Japanese Maples are among the real choice things in ornamental nursery stock. There are quite a number of different varieties but the one that stands out pre-eminently, the best seller is the Blood-leaved Japanese Maple, *Acer polymorphum atropurpureum*.

Perhaps the most popular is the Red fern leaved one, and its companion the green fern leaved one, after these it is hard to say just which is best to grow in quantity.

While the Japanese Maples are fairly well known to the public especially in the vicinity of large nurseries they have not been exploited nearly as much as they should be. They hold rather an unique position among plants, being very rich and choice looking and should be in very large demand if they were better known.

They are just the plants needed for the small yard of a suburban residence, where there is only room for a few plants and these must be necessarily good.

Considering the Japanese Maples are not indigenous to this country they are wonderfully adaptable, being hardy over a great range of territory, but are perhaps, most at home in the latitude of Philadelphia and New York.

A good number are imported annually from Japan, these, however, do not seem to thrive so well as home grown stock. Propagation is perhaps a little slow as it has to be done by grafting, layering or inarching.

If by graft or inarch the stock to use is the plain green *Acer polymorphum*, pencil thickness should be used, these are readily secured through the importers.

If bottle grafting be the method used the stocks are planted out in nursery rows and the grafts worked on them in early summer. The process is sure and few failures need be apprehended.

If the propagation is by inarching, of course it is necessary to have stool plants and the stocks should be established in pots, which may be plunged in the ground at the time of inarching and cut away and stored in the fall, as by that time a good union will be made. These will then be ready to plant out in the nursery rows by the following spring.

It takes a little longer to get plants on their own roots by layering, but with good stool plants, with branches pegged down and properly layered a continuous supply can be kept up.

The cut leaved sorts *Acer polymorphum dissectum*, green fern leaved and *Acer polymorphum dissectum atropurpureum* red fern leaved, should be staked while they are young so as to get as much height to them as possible, as their growth has a downward tendency and the plants will be very squatty unless this is attended to.

The National Nurseryman

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President, THOMAS B. MEEHAN
Editor, ERNEST HEMMING
Secretary-Treasurer and Business Manager, . . .

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Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flouertown, Pa.

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ROCHESTER, N. Y., OCTOBER, 1912.

AMERICAN ASSOCIATION OF NURSERYMEN

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Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.
The California Association of Nurserymen—President, W. V. Eberly, Niles, Cal.; Secretary, H. W. Kruckeberg, Los Angeles, Cal.

DEATH OF CHARLES L. YATES

In our September issue we gave a sketch of the life of our late editor, Prof. John Craig. THE NATIONAL NURSERYMAN was ready to go to press when, like a bolt out of a clear sky, came the news of the death of our Secretary-Treasurer and Business Manager, Mr. Charles L. Yates. It was possible to stop the publication of the September number only sufficiently long to insert a brief notice of his death. With this number we present a photograph of Mr. Yates, also a sketch of his life.

Mr. Yates was a man of winning personality, to know him was to love him, a man of broad views and upright character in which honesty was a cardinal principle. He made friends easily and kept them and was ever loyal to them.

Among the members of the American Association of Nurseryman he was a "hale fellow well met" and no meeting of that association would have seemed complete without him.

Death has taken a number of members from the Association during the last few months, but the good, kind and genial face of "Charlie" Yates will be sadly missed in its gatherings in the future.

THOMAS B. MEEHAN.

INTRODUCTION OF NEW EDITOR

With this issue of THE NATIONAL NURSERYMAN the publishers take pleasure in introducing to its readers, Mr. Ernest Hemming, who has been chosen to carry on the Editorial Department made vacant by the death of Prof. John Craig.

The publishers feel particularly fortunate in securing the services of Mr. Hemming to continue the work heretofore so ably conducted by Prof. Craig, and trust that he may have the hearty coöperation of the readers of THE NATIONAL NURSERYMAN to contribute to make the journal a real active force in the advancement of the best interests of the trade at large.

Mr. Hemming is a practical man having been actively associated with the nursery business all his life. Serving his apprenticeship in England, where it is necessary to begin at the bottom, so that first principles are thoroughly grounded in the young horticulturist, he acquired a thorough and broad knowledge of plant life.

After leaving the Royal Botanic Gardens at Kew he came to this country and for the last fifteen years has been with the firm of Thomas Meehan & Sons. He has an extensive acquaintance with nurserymen and the horticultural trade in general, and with his ability as a writer makes him peculiarly fitted to carry on the work of Professor Craig and continue to make the NATIONAL NURSERYMAN, the mouth-piece of the trade.

PUBLISHERS NATIONAL NURSERYMAN.

EDITOR'S RESPONSE

It is not an easy matter to take up the duties of a man of the caliber of the late Prof. John Craig, who so ably edited THE NATIONAL NURSERYMAN for the last six years. On this account indulgence and coöperation of the readers is earnestly solicited to help the paper to maintain its high standard, and in return the Editor will use his best endeavor to make THE NATIONAL NURSERYMAN

represent the best interests of the trade over the country at large. The policy will be broad, national in scope, rather than local, practical, helpful and sincere.

It will aim to be a mouth-piece of the trade, rather than an advocate of special interests or locality.

Our profession is second to none in importance as the trees and forests of the country are recognized as one of the primary causes that make it inhabitable. While it is true the forests were here before the nurseryman, it is equally true, our cities, towns and villages would be dreary places without the nurseryman, to say nothing of the fruit supply which forms such an important part of the food supply.

The nurseryman is a benefactor to the human race and while he may labor primarily for his food and clothing "The laborer is worthy of his hire" so the food and clothing should be good.

THE NATIONAL NURSERYMAN, therefore, stands for better prices for better stock. Standardization of nursery stock to bring it level with other commercial products. Better and higher training for the young nurseryman and a full share in the prosperity of the country. With these ideals to inspire the NATIONAL NURSERYMAN, under the new management with the assistance of its readers, will be a power in harmonizing and unifying the interest of the trade for its common good.

ERNEST HEMMING.

FEDERAL INSPECTION AND QUARANTINE

Some time since, when the Legislative Committee of the American Association of Nurserymen appeared before the Agricultural Committee of the House to protest against the Federal Inspection Bill, Chairman William Pitkin of the

Nurserymen's Committee made a statement to the effect that the nurserymen did not object to inspection, but they objected to the proposed bill, because it put such broad powers into the hands of those who would have the carrying out of the provisions of the bill and that it was the fear of the promulgation of drastic rules and regulations as much as anything else, that caused the opposition of the Nurserymen to the bill.

The bill, which became a law in August, contains a clause which was inserted to satisfy the nurserymen on this point, viz.: the appointment of a Federal Horticultural Board whose duty it shall be to formulate rules and regulations for the carrying out of the law and to provide for hearing of parties interested before putting quarantine regulations into effect.

The gentlemen selected by Secretary Wilson to act on the board are men who we believe will honestly carry out the provisions of the law according to their best judgment, but it is unfortunate, that there is not one member of the Board who has had some practical knowledge of the nursery business, gained from actual experience as a nurseryman. The Board has prepared a tentative set of rules and regulations and they show their earnest desire to avoid anything drastic by sending out advance proofs of these rules and regulations to various nurserymen for suggestions and criticisms, and they will no doubt be guided largely by the replies which they receive.

In their present form these rules and regulations fully warranted the statement of Chairman Pitkin, that the nur-

serymen feared the method of carrying out the bill, for if the proposed regulations should be adopted in their present form it would cause no end of delay, confusion and loss when the imported stock commenced to move from the other side.

The Federal Horticultural Board will have many important matters to consider, but the most important work they will have to do will be the formulating of such rules and regulations which will carry out the intent of the law, but at the same time be capable of execution without working injury to one of the most important and necessary branches of the nursery business of the United States.

NOTE—The rules and regulations have been modified since this was written. See Report of Legislative Committee, page 370.

PROFESSOR JOHN CRAIG

Prof. Craig took a lively interest in the Western New York Horticultural Society, and always responded promptly and gladly to every invitation that the officers of the Society extended to him, to participate in the proceedings. He was greatly esteemed by the members of the Society, and his addresses were not only highly instructive, but they were inspiring and entertaining. Every one who listened to him went away feeling better for having heard him. He has left behind him a record of a beautiful, useful and busy life, and his memory will be cherished by thousands of Horticulturists all over the country who have benefited by his teachings.

In his death I feel a personal loss, and I extend to his bereaved family my sincerest sympathy, with that of hundreds of other members of the Western New York Horticultural Society.

W. C. BARRY,

Pres. Western N. Y. Horticultural Society.

IN REGARD TO ESTABLISHING PERMANENT TRANSPORTATION COMMITTEE IN AMERICAN ASSOCIATION

Every nurseryman in the country is aware of the fact that numerous railway claims result from improper handling by the railway company of stock in transit, either through delay, neglect or exposure. The average nurseryman is not equipped with facilities for presenting and prosecuting these claims in the most effective manner. Claims are frequently dismissed which, if presented properly, could be collected.

Not one nurseryman in ten is capable of checking over his freight receipts to know if there is any overcharge and how much. Without doubt there are numerous overcharges upon which there should be a refund. This is our experience.

I believe the refund from overcharges alone would pay the salary of a competent man, several times over.

But few nurseries can afford to hire a traffic manager who is up-to-date, sufficiently posted in transportation matters, so that he can make these claims effective.

I wish to call your attention to the advisability of the American Association hiring a traffic manager who is competent to handle all claims which may be presented to him, and who is capable of presenting them in the best manner to secure prompt and satisfactory settlement. Claims are sometimes presented which are void. A competent traffic manager would perceive this fact, the claim could be dismissed, reasons given and labor saved claimant as well as railway company.

A competent man in the employ of the Association I am convinced would save the members many times his salary.

It should be the duty of this party to meet the transportation committee of the various railroads and protect the interest of the association in every way possible. The cost of a competent man, including stenographer, would not be very far from \$3,000 a year. This \$3,000 could be raised by increasing the dues of membership \$2.00 or more as may be necessary. It would be a further inducement for new members to come in and this would increase the income of the Association considerably. I do not believe there would be a protest to the increase of dues, taking into consideration this additional feature.

A competent man can not be secured under a five year contract and the element of time must be taken into consideration from the first. The writer is not an applicant for the position.

A copy of this letter is being sent today to the officers of the Association, and I trust there will be many prompt replies whether in favor or not.

If it seems advisable to secure the services of an efficient traffic manager for the Association, it is not too soon to begin to agitate the matter, that it may be intelligently brought before the Association at the next meeting in Portland.

E. A. SMITH,
Vice President Jewell Nursery Co.,
Lake City, Minn.

TREE SEED NOTES

The crop of tree and shrub seeds this year gives promise of being very good, but fruit tree seeds, such as Mazzard Cherry and Myrobolan Plum are very scarce. There was only about one-tenth of a crop of Mazzard Cherry seed gathered, and Myrobolan is exceptionally scarce. What little of this seed there is can only be had at a very high price.

At the present writing French, Japan and Kieffer Pear and Mahaleb Cherry seed gives promise of being a full crop. French Crab Apple seed is a little doubtful as yet, while it looks short, still it is not possible to state definitely what the crop will be.

Nearly all nurserymen plant deciduous and evergreen tree and shrub seeds to a certain extent and some nurseries make a speciality of growing these seedlings. It is a known fact that the only and most profitable way to propagate certain stock is by planting seeds. Take for instance *Cornus florida*, *Berberis Thunbergii*, *Acer saccharum*, *Acer platanoides*, Shellbarks, Walnuts, Oaks, Pines, Spruces, Junipers and Firs, these varieties are grown from seeds very successfully and large quantities are planted every year. The following seeds should be planted in the fall as soon as the crop is harvested.

Shellbarks, all Maples (excepting Red and Silver, these in the Spring) *Berberis*, Hornbeam, Cherry, Dogwood, Hazel Nuts, Beech, Planes, Mountain Ash, *Quercus alba*, *Q. cerris*, *Q. prinus* and *Q. robur*, Sumach, Roses, Clematis and certain other varieties. All Pines, Spruce, Firs planted in Spring germinate the same summer.

Seeds of Shellbarks, Barberry, Dogwood, Beech and such seeds that are planted in the fall are now beginning to ripen and will be ready for harvesting about the latter part of October. Those intending to plant should make preparations now.

THOMAS LANE.

THE ACCOUNTING DEPARTMENT

By GEORGE W. OTTINGER

It has not been many decades since the expense put upon the keeping of books of account was considered as entirely unproductive and a dead loss. The keeping track of the amounts due us and the amounts owed was considered a necessary evil.

A gradual change has taken place. Some enterprising bookkeeper started in, during his spare moments, to look up some of the accounts and determine which were good and which bad, those whose credit was unquestionable, and those whose credit was doubtful. This information was passed on to the salesmen, who in turn regulated the credit to their trade accordingly; here was the first step of making the Accounting Department a producer. Now there seems to be no limit to the ways in which this department is becoming productive.

All business has its Income and Outgo, and the proportion of one to the other in large measure regulates the profits or losses; wherein these profits or losses occur are determined by the bookkeeper. The various departments of business Income and Outgo and their various relations to the profits and losses are now a portion of the accounting system.

We might take a few of the divisions of Outgo and show wherein the accounting can determine whether the expense be an aid to production of income or a drain upon it. For instance: does the advertising account yield enough, taking into consideration the percentage of the sales spent in advertising? We might further sub-divide and question whether each advertisement or advertising campaign yields its proper amount. The same could be done with general office expense or specific office expense, such as stenographic, order, correspondence, telephone, etc. Then turning to the outside, such expenses as digging, packing, teaming, etc., can be likewise analyzed.

The various individual expenses of production can be taken up and a conclusion reached as to what can be profitably propagated.

It is a truth beyond doubt that profits are only assured by keeping outgo or expense in its sub-divisions in a proper proportion to the income; as they increase, income must increase, and as income increases, careful watch must be kept on the increase in expense that the proper proportion may be maintained. We must produce, sell, and handle or deliver, and the cost of each must be in proper proportion to the income thereby produced.

This is only a very few of the things which the Accounting Department can unravel and determine. Considering the guiding it can do, the pitfalls it locates, and the difficulties it helps solve, this Department is no longer considered a dead expense, but has taken its place as a producer outstripped only by the selling force.

FEDERAL INSPECTION

Proposed Rules and Regulations

Acting under the authority conferred upon him by the Federal Inspection bill which was reported in the September number of the NATIONAL NURSERYMAN as having become a law on August 20th, the Secretary of Agriculture as appointed C. L. Marlatt, Chairman, W. A. Orton, A. F. Burgess, Geo. B. Sudworth and Peter Bisset as members of the Federal Horticultural Board.

The Board promptly quarantined *Pinus strobus*, *Pinus monticola*, *Pinus Lambertiana* and *Pinus cembra*, because of the White Pine-Blister Rust and these pines cannot be imported into the United States hereafter.

They have also formulated certain Rules and Regulations and a form of Application for permit to Import. The permit for same they have submitted to different nurserymen for the purpose of getting criticisms and suggestions.

In brief, it is required that before importing any nursery stock, application on one of the Department forms must be made and as the form is the essence of the whole thing we reproduce same herewith.

UNITED STATES DEPARTMENT OF AGRICULTURE
FEDERAL HORTICULTURAL BOARD
WASHINGTON, D. C.

APPLICATION FOR PERMIT TO IMPORT NURSERY STOCK

....., 191

To the Secretary of Agriculture,
Washington, D. C.

Sir:

I respectfully request that a permit be issued for the importation of nursery stock as follows:

Quantity.	General Nature.	Age or Height.
.....	Fruit trees .....	.....
.....	Fruit tree stocks .....	.....
.....	Grape vines .....	.....
.....	Bush fruits .....	.....
.....	Roses .....	.....
.....	Rose stocks .....	.....
.....	Forest and ornamental deciduous trees .....	.....
.....	Ornamental deciduous shrubs .....	.....
.....	Coniferous evergreen trees .....	.....
.....	Evergreen trees other than conifers .....	.....
.....	Evergreen shrubs other than conifers .....	.....
.....	Stocks, cuttings, or seedlings not otherwise specified .....	.....

Country and district where grown

Name and address of shipper

.....

Port of entry

Approximate date of arrival

Name of importer

Name of consignee

Destination

Very respectfully,

.....

.....

Application may be made by telegraph, in which case the information requested above should be given.

**Pinus strobus* L., *Pinus monticola* Dougl., *Pinus Lambertiana* Dougl., and *Pinus cembra* L., are excluded and can not be imported, because of White Pine Blister Rust.

The term "nursery stock" shall include all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds or other parts of a woody nature, fruit pits and other seeds of fruit and ornamental trees or shrubs, and other plants and plant products for propagation, except field, vegetable, and flower seeds, bedding plants, and other herbaceous plants, bulbs, and roots. Field grown florists' stock, as mentioned above, includes all plants grown outside of greenhouses, hotbeds, or cold frames covered with glass, except herbaceous perennial, bedding plants, such as geraniums, carnations, pansies, etc., bulbs, tubers and corms.

On approval of the Secretary of Agriculture, a permit will be furnished to the applicant, one copy will be given the applicant, one copy to the collector at the port of entry, and the third filed with the application in the Department. The permit will be void three months from date of issue.

Entry of nursery stock will not be allowed unless accompanied by a Certificate issued by a properly authorized official of the country from which it was shipped, stating that it has been thoroughly inspected by him or under his direction within three months preceding date of shipment.

All boxes and bales must be correctly marked to show the general nature and quantity of the contents, the locality and country where grown, the name and address of the consignor and the name and address of the consignee.

Immediately upon the entry and before removal from the port the person receiving the stock, shall notify the Secretary of Agriculture, stating the nature and quantity of the nursery stock, the country and locality where grown, the date of entry and the name and address of the Consignee to whom it is proposed to forward the nursery stock together with the name of the carrier by which shipment is contemplated and the proposed date of delivery for transportation. At the same time a similar notice must be sent to the Horticultural Inspector or to such other official of the State, Territory or District to which the nursery stock is to be shipped as the Secretary of Agriculture shall designate.

All invoices of nursery stock shipped to the United States shall bear the number of the permit issued by the Secretary of Agriculture and have attached to them a declaration of the shipper, made before a United States Consular Officer, as follows:

"I.....the undersigned, do solemnly and truly declare that I am the.....of the stock herein mentioned and described, and that I believe it to consist of nursery stock which contains no injurious plant disease or insect pests."

"The stock was grown in.....by.....during the year.....and was exported.....and consigned to..... The marks on the package are true and the nursery stock was inspected on..... by.....and believed by him to be free from injurious plant disease and insect pests. This shipment is offered under permit No., issued by the Secretary of Agriculture....."

The rules and regulations also provide for quarantine, both domestic and foreign, at the discretion of the Secretary of Agriculture and provision for public hearing before the Board, etc.

Later Information

On September 16th and 17th the Horticultural Board held a hearing in Washington. William Pitkin, chairman of the Legislative Committee appeared on behalf of the American Association of Nurserymen, and James McHutchison, W. Rolker and M. Knickman for the New York Importers' Association.

Each paragraph of the proposed rules and regulations was carefully gone over and discussed, and on the 17th, after an executive session of the board, they announced that they would adopt many of the changes proposed by the committee. The changes are essentially as follows:

A broad permit will be issued authorizing importations from a given firm and district covering the entire shipping season. This instead of a separate permit for each shipment as originally proposed. Permits will expire on June 30th, following date of issue, instead of three months.

Foreign inspection certificates provide that for stock to be shipped between October 1st and May 31st, inspection shall be made after October 1st and for stock shipped during the growing season, inspection shall be made not more than thirty days prior to date of shipment.

Foreign certificates of inspection to show the district where the stock is grown, but this will be waived for the present season.

Seattle, Washington, is added as a port of inspection for goods coming from countries where they have no official system of inspection.

It was stated unofficially that the board would give every assistance to importers and be more or less lenient with the laws this year, that no unnecessary hardship will occur.

Nurserymen who place their foreign orders through New York importers need not personally apply for permit as the importing agent will attend to it.

EXPERIENCES IN GROWING HOLLYHOCKS

Of the old-fashioned hardy perennials few are more popular than the Hollyhocks and well they deserve this popularity. With their tall spikes of pretty flowers during mid-summer, they make a grand show and fill a position which nothing else could do, but owing to the ravages of disease there is never sufficient plants of good size to fill the demand and the small finger-like seedlings used to fill out have discouraged many buyers.

While the rust that attacks these plants has meant heavy losses to many growers, yet the writer feels that other diseases in plant life having been overcome this also can be successfully combatted and the demand is at least worth a special effort on our part. To secure an interchange of views, in the hope that out of them all some good may be secured, the writer is here giving his experience of the last six years, trusting that it may help some others who are working for the saving of this popular flower.

The result of my experience has been greatly varied, sometimes complete success, sometimes total failure. A cool, not

over wet summer has produced almost always success, while a week of warm, rainy weather has developed disease, the extent of loss depending a great deal on the quantity of plants and how long unfavorable weather continued. Various methods have been tried to overcome this and for me cultivation has proven the most successful. At this writing we have just passed through a week of weather favorable to disease, and so far the only disease which has developed is in two varieties, and which was caused by planting some late plants, which were affected in the frame among the growing stock. Every few days the soil is stirred around the plants, either by cultivation or by raking soil away from stems. Plants on which the soil is permitted to remain in the base of leaves are most susceptible to the disease and for this reason the soil is either hoed or raked away after the first rain following cultivation. Last year about the same time we had similar conditions with more rain and ground being too wet to get cultivators at work, nothing was done for two weeks and by that time the disease had developed to such an extent that by the time we got it under control at least three-fourths of the stock had disappeared. Maroon not being attacked at all, while yellow was a complete loss.

Rapid growth and plenty of fresh air from seedbed to buyer appears to be an absolute necessity. Seedlings potted up and kept close in frames developed diseases so that two weeks after planting out entire stock was gone. While in other cases where the free circulation of air was prevented by obstructions around the field, strong healthy plants were attacked.

Were it not for the disease, Hollyhocks would be one of the easiest of perennials to handle. My method is to sow about April 1st, in cold frame and as the seed germinates quickly, in a short time they are ready for potting. Potting the seedlings give best results by producing numerous small roots, instead of large tap roots. Sash are placed over them to control the proper amount of moisture, which is kept rather on the dry side with plenty of fresh air. Ground for planting in should be well worked and after plants are established kept constantly stirred.

Spraying with Bordeaux Mixture has been recommended for the control of the disease but has been found better as a preventive than a cure.

Some growers report heavy losses keeping plants over winter; so far I have been pretty successful, except where plants were badly diseased in fall. In high well-drained ground I have carried them through safely by letting them stand and placing manure along the rows. In ground which is liable to become wet during the winter I find it better to dig up and heel in carefully not crowding plants. Select a dry spot with just enough moisture to keep plants from drying out during winter, and permit them to freeze slightly, this keeps them dormant and also keeps mice out. Cover with some dry material, hardy grasses where available, or dry forest leaves are good; cover sufficiently to keep just a little frost around them, over this place a water-proof covering, raised enough to permit air to pass over them. As they start early in spring care should be taken not to allow covering to remain on too long. If plants are kept on dry side they will be slower in starting and can be shipped later

than otherwise. No doubt many of the readers of this article have gone deeper into the study of these plants than I have, and could give experiences which would accomplish more good than this, and if they would only give us the benefit of it, I am sure the Editor would be glad to have them do so and I know we would be the better for it and perhaps by this interchange of experiences we may be able to successfully cope with the disease.

GEO. F. KIMBEL.

RENOVATION OF HERBACEOUS BORDERS

During October and early November is the best time to renovate the hardy border or hardy garden. If your plants have not been disturbed for several years some of the more vigorous growing plants will be monopolizing more than their share of room and crowding out the weaker growing ones. Some have, no doubt, disappeared entirely, while others have degenerated into mere caricatures of their former selves.

While the appearance of the border during the past summer is fresh in the mind, it will be an easy matter to rearrange, as most of the tops will still be on the plants to identify them. It will be a simple and interesting job, but if left until spring it will require an expert to identify the plants with the tops gone and everything below ground.

It is an easy matter to fill in the bare places and take out plants that have become too thick, but you will find it worth while to dig up all the plants in the border, so as to be able to thoroughly trench it, turning under a liberal amount of well-rotted manure. After this is done the ground can be nicely leveled and the plants set back, arranging them as desired. Many clumps will want dividing, having become too large.

If you want a mass effect in such plants as pæonies and phlox you will find better results will be obtained from three thrifty divisions set a foot apart than you will from one huge undivided clump.

Perhaps you have noted the past season that there was a dearth of bloom at some one time, and it will be necessary to add sorts that flower at that particular period; or, maybe there was a lack of some particular color or a clash that can be neutralized by a liberal introduction of white or a different arrangement that will act as a foil.

There are always some good things that may be added, because the charm of these old-fashioned gardens lies in the fact that they are never the same, never complete, and never so good that it is not possible to improve them.

The fall is a good time to add bulbs to them. Clumps of a dozen to twenty narcissus of different kinds are always a good addition. They flower early, before the majority begin to think of it, and after the blooms are gone it does not matter if the space they occupy is overhung by later-flowering nearby plants. Get some of the good ones, like Emperor, Empress and Sir Watkin.

The Darwin and Cottage Tulips are also splendid for the same purpose. The low-priced kinds are as good as the expensive ones unless you happen to be a fancier.

These late flowering tulips are strong growers, $1\frac{1}{2}$ to 2 feet high, so should not be set too close to the front.

Lily bulbs are also good and may be used to great advan-

tage in prolonging the season of bloom without overcrowding. A good clump of lilies will dominate the border while in bloom.

Renovate the hardy garden in the fall. You will enjoy it so much more watching the plants grow next spring, and be sure to add a few things with which you are not acquainted; they will add double interest to your garden.

Among the Experiment Stations

NEW YORK AGRICULTURAL EXPERIMENT STATION.

Notice of Bulletin No. 348

The New York State laws now require inspection of insecticides and fungicides somewhat similar to that so effective in case of fertilizers and feeding stuffs. The results of the analyses of these materials are reported for 1912 in Bulletin No. 348 of the Station at Geneva; and, on the whole, indicate a very satisfactory condition of goods sold for the repression of insects and prevention of plant diseases. Some materials were sampled and analyzed, however, that seem to have little value for the purposes for which they are sold; so purchasers would do well to look the bulletin over before making any extensive purchases of insecticides or fungicides. All Station bulletins are sent free on application.

Brief Notes on Bulletin No. 349

The final one of the potato-spraying bulletins of the ten-year series sent out by the Station at Geneva is now distributed. It confirms the conclusion previously reached, that potato-spraying is a profitable practice for the New York grower. The proof is ample and should have action-compelling weight with every potato raiser. If not already thoroughly convinced of the merits of spraying, drop a card to the Station at Geneva and get Bulletin No. 349. Like all other Station bulletins, it will be sent you free.

Review of Bulletin No. 349

For ten years the Station at Geneva has conducted potato spraying tests on its own grounds and at Riverhead, Long Island; for nine years it has received reports from six to fifteen farmers who have sprayed potatoes and left check rows so that they knew whether spraying increased their yields or not and also knew how much the spraying cost; and for seven years it received additional reports from five to sixty other farmers who sprayed, but not under Station supervision. Now, in Bulletin No. 349, the results of the ten years are summarized somewhat as follows: In tests on its own grounds, spraying three times has given an average annual increase of 69 bu. to the acre and spraying five to seven times a gain of $97\frac{1}{2}$ bu.; spraying by Station men at Riverhead, under much less favorable soil and climatic conditions, raised the yields 25 and $45\frac{3}{4}$ bu., respectively; the farmers' business experiments gave an average increase of 36.1 bu. to the acre and an average net profit of \$14.43 an acre; and 205 volunteer experiments secured an average acre-gain of 54.3 bu.

The Station maintains that *it pays to spray potatoes regularly*. Why not send for the bulletin and weigh the proof?

PACKING MACHINES WANTED

Will you please let us know where we can purchase machines for packing nursery stock, boxing and baling?

A. M. N. CO., LTD.

Makers and dealers of the above will find no better medium in which to advertise their goods than THE NATIONAL NURSERYMAN.

THE NATIONAL NURSERYMAN is an interesting and well edited periodical.

Glasgow, Scotland.

RANKIN & TOD.

THE VARIATION OF APPLES UNDER DIFFERENT CLIMATIC CONDITIONS

Dr. J. K. SHAW, Massachusetts Agricultural College

(Digest of an Address before American Association of Nurserymen)

The subject of the discussion put in a practical way is, "What varieties of apples are to be planted in a given locality?" This I shall take up in a somewhat general way.

We read now and then of farmers who have achieved marked success in their calling, making a third on their investment, yet many farmers are carrying on their business at a loss. What is true of farmers in general is more true of fruit growers. We all feel sure that a very large proportion of our trees will be failures. Fruit growing is an uncertain business. The uncertainty is due in considerable degree to our ignorance of the effects of environmental influences on the fruit. To one who has had an opportunity of observing varieties of apples in widely separated localities, the variations in appearance and quality are most striking. I do not believe a Nova Scotia grower of Ben Davis would recognize one of these apples grown in Arkansas. In color, form, quality, in every way they are unlike. The same is true of other sorts provided they are widely distributed. Even in different trees in the same orchard, some difference is noted. Every fruit grower is aware that crops of different seasons differ. In brief, all varieties vary greatly with conditions. The more one studies these variations, the more one is impressed with their importance.

CAUSE OF VARIATION

The causes of environmental variations are legion, but they may be grouped under three heads: (1st) those caused by different cultural methods; (2d) those due to different soils; (3d) those due to varying climatic conditions. In passing, I would suggest the fact that all three are more or less interdependent. The soil in the spring may be modified by cultural methods. Perhaps we may mitigate the ill effects of climatic conditions by the same means. We must select for planting in a given locality varieties suitable for planting there, not forgetting cultural methods, markets, and other conditions.

We need a new sort of variety study. We want to know what are the conditions of soil and climate necessary for the success of different varieties. The logical way to attack this sort of variety study is to learn something of the variations brought about by different environments. In four years of work at the College we have only made a beginning of the problem, but interesting results have been secured.

VARIATION IN BEN DAVIS

We have studied the Ben Davis on account of its wide distribution, and find that in Nova Scotia and Puget Sound regions it reaches its greatest elongation, while in the Ohio Valley the other extreme prevails. There are also marked seasonal differences in any of these localities, but they are less pronounced in maritime regions or near the Great Lakes. Study has shown that this elongation was brought about by

low temperatures during the two weeks after blossoming. We have found that temperature has a great deal to do with the external appearance and quality. Contrary to the opinion of some, these two are generally correlated. It must suffice to say that high quality and good appearance are dependent upon good nutrition for the growing and ripening fruit, and this is in considerable degree dependent upon favorable temperature during growth and ripening.

The varieties of New England are not those of New Jersey, nor are those of Wisconsin found in Missouri. No varieties succeed well great distances north and south. Occasionally we find a case where a variety succeeds well in widely separated localities, as, for example, Newton Pippin, which does well in both Virginia and Oregon. But I find that the summer temperature in these regions does not vary much.

Summer and fall sorts do extend more widely north and south. Yellow Transparent and Oldenburg are recommended for culture over nearly all the apple country of North America.

VARIETIES REQUIRE GIVEN TEMPERATURES

We have obtained the average monthly temperature for the growing season. From March to September we get a mean temperature ranging from 52 to 68 degrees. We get in the northern part of the apple country temperatures as low as 58 degrees, while in the Southern Alleghany Mountains, it goes up as high as 68. By a study of variations in apples, we have grouped them easily under each degree of temperature. Within this range the Baldwin demands a summer temperature of 56 degrees, the Ben Davis 64. If we thus have an optimum temperature for a given variety it follows that any departure will result unfavorably. What are the effects? If the summer mean is too high, the effects are a poor keeping quality, inferior flavor, poor color, and when carried to extremes, premature dropping, rotting, and smaller size of fruit. If the opposite condition of a too low summer temperature prevails, fruit fails to mature, it is acid, is of inferior size and not fully colored, in short, is an unripe apple. That is the case of Ben Davis and Winesap in New England. Latitude and altitude are determining factors of the mean summer temperature. It is probable that a difference of not more than two hundred feet elevation will make a considerable difference in the keeping quality of a variety. I believe it unwise to plant Baldwin above twelve hundred feet in Massachusetts. There will be seasons when it may not mature properly. Slope has its effect, no doubt. A light soil will hasten maturity, while a heavy one will delay it. It is our task to learn more of these influences on the apple. (Following this part of his address, Dr. Shaw commented on a number of maps which were shown, being the result of studies of the adaptation of different varieties to various sections of the country).

LARGE PECAN ORCHARD SOLD

An interesting report comes to THE NATIONAL NURSERYMAN from Albany, Georgia, stating that the Barnwell tract of pecan trees at Baconton, Georgia, has recently been sold to a syndicate of South Carolina and Northern investors, who intend to retain the entire grove. The immense orchard consists of six hundred acres of nut trees, half of which are now in bearing, with an estimated crop of seventy-five thousand pounds the present year. The syndicate is composed of the following men: W. C. Fripp, Columbia, S. C.; Dr. William Weston, Columbia, S. C.; Harry Johnson, New York; F. W. Royer, Pittsburgh, Pa.; Judson P. Welsh, New York. The consideration is \$200,000. While this would give an average price of \$333.33 per acre, Mr. Barnwell, of course, placed a much higher value on the eight year old bearing trees than on the rest of the orchard, which was composed of younger trees.

CUSTOM HOUSE DELAYS

There should be an immediate reform in Custom House regulations between the United States and Canada, as they apply to the interchange of perishable freight, such as nursery stock, etc., and the time expended in the amateur handling of such fumigation requirements as the law demands. The fees too for the work appear to be exorbitant, and savor considerably of "politics" to use a "mild term." However, we are apprised of the rough handling of such stock during the fumigating process, and the altogether deterrent effects which the conditions mentioned must have on the probable direct purchasers of nursery stock and planting material, which may have to cross the border. We should be glad to learn of the experiences of other professional landscape men in their use of imported material for their work, or where they may have to submit to the fumigating "process" under other supervision than their own. There is undoubtedly still need for the introduction of current business methods in our Treasury Department in connection with custom house methods; far greater expedition should be exerted and a very large percentage of the "red-tape" so common, especially in the clearing of the smaller shipments, should be lopped off. Custom House delay has become too proverbial for an up-to-date government and progressive people.—*Park and Cemetery.*

A NEW NURSERY COMPANY

The Wills Valley Nursery Company at Fort Payne, Ala., with \$100,000 capital has just been organized. The officers of the company are: Oscar V. Case, president; Nathan W. Hale, vice-president; A. I. Smith, secretary and treasurer. The directors are: Nathan W. Hale, A. I. Smith, E. E. Rutherford, M. W. Howard, Oscar V. Case.

A NEW TREE

A new golden leaved variety of *Populus alba* is being introduced by A. G. M. Richard, Nurseryman, Naarden, Holland. The wood and the underpart of the leaves are silvery white, the upper part of the full grown leaves dull golden yellow and the young shoots white powdered, like Edelweiss. The color is said to be constant from spring until fall. It will be known as "*Populus alba Richardi.*"

Our Book Table

POPULAR GARDEN FLOWERS, by Walter P. Wright. Published by Doubleday, Page & Co. 5½ x 8". Illustrated 376 pages.

This is not a book which is put down after a few pages have been read—one wants to keep on, either to learn some valuable point in regard to the care of a favorite plant, or perhaps to note an interesting remark in connection with the history of the flower being discussed; for the author has such a happy way of expressing his thoughts that it is a great pleasure to learn from the pages of his book. More than half a hundred full page illustrations add to the interest of the work, six of which are in color. Unfortunately, some of the less well known species are not pictured, but the black and white illustrations that are used are very clear and natural.

"Popular Garden Flowers" is the third book which Mr. Wright has presented to the public on the care of gardens. First came "The Perfect Garden," and then "The Garden Week by Week." The latest takes all the most important flowers, and tells in an entertaining manner of their history and their position in literature, before taking up the more practical questions of culture and varieties. Dealing in turn with anemones, begonias, carnations, crocuses, foxgloves, gladioli, roses, sweet peas, tulips, and more than a score of others, in thirty-six chapters, this attractive volume will furnish a great deal of interesting information which is not elsewhere readily obtainable.

POPULAR FRUIT GROWING, by Samuel B. Green. Published by the Webb Publishing Co., St. Paul, Minn. Illustrated. 5¼ x 7¾". 328 pages, including appendix and index. Price \$1.00.

That this book filled a need may be inferred from the fact that the fourth edition has just been published within three years of the time the work appeared. One of the first things noticed in glancing over the volume is the ease with which any special topic in a chapter can be located; for the important words at the beginning of a paragraph and in some other places are prominently printed in heavy type, thus readily catching the eye.

The book is based on lectures given to the students of the University of Minnesota, where the author was for the last twenty years previous to his death, head of the Department of Horticulture, and is valuable as being the result of experience gained and methods used in building up this Department. Some re-arrangement of subject matter was made before the present edition went to press, thus making the text conform more closely to the usual plan in teaching this subject in this country. The book is written in an interesting, easy manner which is easily understood by beginners in the science of fruit growing.

LANDSCAPE GARDENING, by Edward Kemp, edited by F. A. Waugh. Published by John Wiley & Sons, 1911. 290 pages. 7½ x 5 inches.

The fourth edition of this well known work by F. A. Waugh comes to us in considerably enlarged and amplified form. It is not clear without a careful comparison of the original and this edition what part the editor has contributed aside from a number of attractive half tone illustrations. Inasmuch as we have mentioned this volume before in our review columns, we do not wish to more than add at this time that it is a book which nurserymen can well afford to keep on their shelves, and which will give those who are interested in landscape work the kind of definite information that many are seeking. There are few subjects which are more indefinitely treated even by landscape lecturers than outdoor art. I suppose the same remark might be made with reference to other fine arts, but the nurseryman who is possessed of landscape desires wishes concrete examples and specific directions. He will get a good deal of this in Kemp's revised edition, and we have much pleasure in commending the volume.

THE NATIONAL NURSERYMAN:

Enclosed you will please find my check for one dollar (\$1.00), for which kindly renew my subscription for the coming year.

I appreciate your paper very much and now that I have taken it for two years would not want to be without it.

Yours very truly,
Ohio. E. C. MORLING.

THE BEST TREES FOR CITY STREETS

We are indebted to "The American City" for the following interesting table. It was compiled with the assistance of the foresters of the cities named in the table. Each forester was given six votes with the result as given in the table:

Norway Maple (<i>Acer platanoides</i>)	American Elm (<i>Ulmus Americana</i>)	Red Oak (<i>Quercus rubra</i> , or <i>Quercus coccinea</i>)	Oriental Plane (or European Sycamore) (<i>Platanus orientalis</i>)	European Linden (<i>Tilia Europæa</i>)
Cleveland (1) East Orange (2) Brooklyn (2) Grand Rapids (2) St. Louis (3) Buffalo (3) West Newton (3) Chicago (4) Washington (5)	Washington (1) West Newton (1) Buffalo (1) Chicago (1) Grand Rapids (4) New Orleans (4) East Orange (6)	Brooklyn (3) Washington (4) St. Louis (5) Buffalo (5) Chicago (6) Grand Rapids (6)	East Orange (1) Brooklyn (1) St. Louis (1) Washington (2) Cleveland (4)	Buffalo (4) East Orange (4) Brooklyn (6)
Sugar Maple (or Rock Maple) (<i>Acer saccharum</i>)	Scotch Elm (<i>Ulmus campestris</i>)	Pin Oak (<i>Quercus palustris</i>)	American Sycamore (<i>Platanus occi- dentalis</i>)	American Linden (<i>Tilia Americana</i>)
	Buffalo (2) Cleveland (3) Brooklyn (4)	East Orange (3) Washington (3) St. Louis (4) Buffalo (6) Cleveland (6)	New Orleans (3) Chicago (5)	Chicago (3)
	Camphor (<i>Officinalis camphora</i>)	Live Oak (<i>Quercus virginiana</i>)	White Ash (<i>Fraxinus americana</i>)	Ginkgo (<i>Ginkgo biloba</i>)
Grand Rapids (1) Cleveland (2) West Newton (2) East Orange (5) Washington (6)	New Orleans (5)	New Orleans (1)	Chicago (2) West Newton (5)	Brooklyn (5) West Newton (6)
Red Maple (<i>Acer rubrum</i>)	Soft Maple (<i>Acer saccharinum</i>)	White Oak (<i>Quercus alba</i>)	Water Oak (<i>Quercus nigra</i>)	Hardy Catalpa (<i>Catalpa speciosa</i>)
	St. Louis (2)	Grand Rapids (5)	New Orleans (2)	West Newton (4) Cleveland (5)
Grand Rapids (3)			Paper Mulberry (<i>Broussonetia papyrifera</i>)	Ligustrum (or Privet) (<i>Ligustrum Japonicum</i>)
			St. Louis (6)	New Orleans (6)

Order of choice shown by figures in parentheses

APPOINTMENT OF TEMPORARY TREASURER

With the approval of the officers and the Executive Committee of the American Association of Nurserymen, President Thomas B. Meehan has appointed Charles J. Maloy, Rochester, N. Y., as temporary Treasurer, to fill the unexpired term of the late Treasurer, Charles L. Yates.

TO ENCOURAGE THE HOME ORCHARD

The Indiana Apple Show Commission is trying to encourage the preservation of the home orchards by appropriating \$150.00 to be given in premiums. President E. R. Smith says, "Too many of our modern Apple Shows cater solely to the commercial grower."

Conard & Jones Co., are increasing their cold storage facilities considerably; the new work being done in concrete, an extension of the present system.

Their greenhouse system is also being enlarged by the addition of two new glass houses 120' x 19' each. A 60,000 gallon cistern with a 4,000-gallon pressure tank is also being installed, Morse & Fairbanks pump and engines being used.

WEDDING BELLS

Announcement is made of the marriage of William Flemer Foulke to Miss Emily Humm on Tuesday, September 10th. They will reside at Auburndale, Flushing, L. I. The NATIONAL NURSERYMAN extends congratulations.

WHAT WALNUTS TO PLANT

Because of the blight that is killing all the Chestnut trees in the country, or on its way to do it, the owners of such trees in the districts which the fungus has already entered are cutting down all the perfect trees as well as the infected ones, feeling sure nothing will save them, and realizing that the timber from them is of more value now than after they become disease stricken.

As it appears probable that the commissions appointed to investigate the cause and cure of the disease will be unable to tell us more than we already know, viz., that a fungus is the cause of it, and all practical horticulturists know that fungicides are the remedy, it remains for experiments to prove how and when to use these preventives. In the meantime the trees are dying all around us, and between one thing and another it looks probable that the Chestnut tree will soon be a thing of the past.

What best to take the place of the Chestnut is worth considering. Nuts are always in demand, and the probability is that there will be a great demand for the nuts of the European species, *Castanea vesca*, which, while not nearly of the good quality of the American, will be better than none at all.

There will probably be a better call for Walnuts as well as for Shellbarks. Of walnuts, the two best ones are the European, *Juglans regia*, and the native one, *J. nigra*. The Butternut has flesh of good quality but there is so little of it that only a hungry boy will crack them to get at their meat. There are two Japanese ones, *J. Sieboldiana* and *J. cordiforme*, neither of which is worth planting for its nuts, whatever the value of the timber may be.

No Walnut has ever equaled the European in quality of nut, and this tree is quite hardy from Pennsylvania southward and eastward along the coast to Connecticut. The black Walnut is a well known hardy tree, well distributed throughout the country in its wild state.—*Florists' Exchange*.

If you are not a regular reader of THE NATIONAL NURSERYMAN, subscribe at once.

Catalogues Received

P. J. Looymans & Zonen, Oudenbosch, Holland. Agents, Aug. Rolker & Sons, 31 Barclay St., N. Y. City. 1912 and '13 catalogue of Hardy Ornamental Trees, Shrubs, Evergreens, Roses, Conifers, etc.

P.D. Berry, Dayton, Ohio, Wholesale price list of small Fruit Plants.

Mount Arbor Nurseries, Shenandoah, Iowa. Wholesale price list.

Bound Brook Nurseries, Bound Brook, N. J. Surplus stock list for Fall, 1912, and Spring, 1913.

Bay State Nurseries, N. Abington, Mass. Wholesale price list of Shrubs, Trees, Evergreens, Vines, Roses and Herbaceous Perennials.

C. R. Burr & Co., Manchester, Conn. Wholesale trade list.

Peter Henderson & Co., Cortlandt St., N. Y. City. Autumn Catalogue.

Saddler Bros. Nurseries, Bloomington, Ills. Wholesale catalogue of trees, shrubs, vines, Roses, etc.

Ohio Nursery & Supply Company, Elyria, Ohio. Advance price list Fall 1912, and Spring 1913.

F. H. Stannard & Co., Ottawa, Kans. Wholesale price list for Fall, 1912.

Huntsville Wholesale Nurseries, Huntsville, Ala. September Bulletin.

Arthur Boddington, 342 W. 14th St., New York. Florists' Bulbs and Seeds for forcing and planting.

Ornamental Nurseries, Henry Kohnakie & Son, Painesville, Ohio. Wholesale price list, Fall, 1912.

Pan Handel Nurseries, J. K. Henby & Son, Greenfield, Ind., Wholesale Catalogue for Fall, 1912.

C. M. Hobbs & Sons, Bridgeport, Ind. Wholesale price list.

The East End Nurseries Company, Boskoop, Holland. Wholesale Rose catalogue. (A very pretty cover.)

Josselyn Nursery Co., Fredonia, N. Y. Wholesale catalogue and price list of American Grape Vines.

Willowdale Nurseries, Rakestraw Pyle Co., Kennett Square, Penn. Wholesale price list for Fall, 1912.

W. & T. Smith Company, Geneva, N. Y. General catalogue of hardy fruit and ornamental trees, shrubs, vines and roses.

Easterly Nursery Co., Cleveland, Tenn. Wholesale price list, Fall, 1912.

Tennessee Nursery Co., Cleveland, Tenn. Surplus list for Fall, 1912.

Jackson & Perkins Company. Wholesale Nurseries, Newark, N. Y. Trade price list for Fall, 1912, and Spring, 1913.

Vincennes Nurseries, W. C. Reed, Vincennes, Ind. Wholesale price list for Fall, 1912.

PEACH SEED

IF YOU WANT PEACH SEED WRITE US REGARDING KIND AND WE WILL CHEERFULLY QUOTE PRICES AND SAMPLES.

Established 1859 **W. W. WITTMAN & CO.,**
BALTIMORE, MD.

A Large Stock of

**Apple, Pear, Cherry and Peach
Grape Vines, Blackberry and
Raspberry Plants**

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio

THE ELLISVILLE NURSERY offers its usual supply of Apples and Peaches in the leading varieties; Apple $\frac{1}{2}$ and up and $\frac{3}{4}$ and up at very reasonable prices. Sample sent if desired.

ANTHONY WILMAS, Chesterfield P. O., St. Louis Co., Mo.

FOR SALE—NURSERY PLANT

High grade small nursery, in middle west, well stocked and equipped, all inside city limits of 2000 population. Buildings cost over \$8,000.00. Opportunity for two live young men. Account of health owner will make sacrifice for quick sale.

HENRY LAKE SONS CO., Black River Falls, Wis.

WANTED—by a large retail nursery, a high-grade man, capable of starting and operating mail order nursery business. A great opening for an A No. 1 man. Must be honest and temperate. State experience, age and full particulars in first letter. Address Box No. 10,

Care of NATIONAL NURSERYMAN.

WANTED a good, reliable and competent nursery foreman for centrally located nursery of three hundred acres. Will pay good salary to right man. State qualifications, salary expected, if you have a general knowledge or have specialized, etc. No attention will be given inquiries not accompanied by reliable references.

Address "C", care of NATIONAL NURSERYMAN.

WANTED a good, reliable nurseryman to invest in an old established business to act as treasurer and office man with from \$15,000 to \$18,000 to invest, with services. One of the present partners wishes to retire from business. This is a live up-to-date plant and will stand a thorough investigation. Located in the north central states. Must be a good business man, sober and honest. A fine opportunity for the right man. Address "L", care of NATIONAL NURSERYMAN.

WANTED We wish to increase our capital stock and sell same to reliable and competent nurserymen that wish to invest with services. We can use one man each as superintendent as follows: one good shade tree and ornamental grower, one good evergreen grower, one small fruit, one good fruit grower, one good rose and greenhouse man. Must invest at least \$2,000, with good salary. A well-established nursery with a good trade. Must be a good hustler and energetic and good with men and no booze fighter. Address "O", care of NATIONAL NURSERYMAN.

EXTENSIVE STOCK of Hardy Rhododendrons, Azaleas, Andromedas, Kalmias, Ericas, Ornamental Evergreens, Flowering Trees, Forest Trees, etc. The stock is extremely hardy being grown on high and exposed situations, and of first rate quality, prices low. Write for Catalogue containing large variety of general Nursery Stock. Excellent shipping facilities from Liverpool. **JAMES SMITH, Scotland Nurseries, TANSLEY, MATLOCK, ENGLAND.** Cable address, "Scotland Tansley, England."

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Has surplus CONCORD GRAPE, CURRANT and STRAWBERRY PLANTS at 90 cents a thousand up, to exchange for Apple and other trees. Also wants Surplus Lists.

Would lease for term of years, with option to buy, well established Nursery business including 15 acres of land. Buildings consisting of new house, good packing and storage shed, cellar barn, etc., to parties with some money or credit to operate business. Address "W" care of this paper.

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all leading market sorts for Spring, 1912

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We supplied many of the largest growers the past season to their entire satisfaction.

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60,000 Apple grafted 1 year whips, 1 to 2 feet, 2 to 3 feet, 3 to 3½ feet. Long on Grimes Golden, Black Ben Davis, Delicious, Winesap, Stayman Winesap, Spitzenburg, Wealthy, York Imperial, Yellow Transparent, N. W. Greening, Rome Beauty, Dutchess of Oldenburg, Early Harvest, Stark, Red Astrachan.

10,000 Pear budded 2 years, assorted, 4 to 5 and 5 to 6 feet.

6,000 Pear budded 1 year, Kieffer and Garber, straight whips, 4 to 5 and 5 to 7 feet.

100,000 Catalpa Speciosa Seedlings, genuine, 1 to 2 and 2 to 3 feet.

1,000 American Arbor Vitae, 3 to 5 feet.

1,000 Norway Spruce, 2½ to 3 feet.

Also a general line of stock. Can furnish Peach in assortment with other stock.

I am in position at this time to name a special price on certain articles of import. Write me.

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CARL H. WEBER, Prop.

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50,000 Oriental
Plane Cuttings

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1,000,000 CATALPA SPECIOSA, 1 year. Genuine

100,000 RASPBERRIES

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WILD FRUITS, PLANTS AND FLOWERS.

Blueberries, Blackberries, Raspberries, Salmonberries, Salalberries, Oregon
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California Privet, 1 and 2-year, extra fine. : : :

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Seedlings of a strain, which can hardly be detected from grafted plants. Of this strain a good many plants are selected and preferred to grafted plants.

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Seeds of Best Quality. Guaranteed New Crop.
Samples and lowest prices upon application.

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1 year Seedlings, 6 to 10 and 10 to 14 in.
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Send in your Want Lists.
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1 year transplanted and seedlings, free from disease, 5 to 9 m-m, 4 to 6 m-m, 3 to 5 m-m.

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If you want a liberal sample, full particulars and proof that it is about the best thing you can use for your packing, just write your name and address below and mail to

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OVER HALF A MILL ON
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PLUMS AND PEARS. Enormous stock in leading kinds.

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ROSES, Etc.

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Best shipping facilities via Hamburg.

General Price-List free on application.

Lombardy and Carolina Poplars

8 to 10 ft.; 12 to 14 ft.; 16 to 18 ft.; 20 ft.

Berberry *Thunbergii*

Fine Lot Transplanted

1 to 1½ ft.; 2 ft.

Raspberry Plants

Golden Queen and Cuthbert

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500,000 TREES

IN ORDER to clear the land this Fall we will make very attractive prices on your needs in the following list of strictly-first class stock.

One, two and three year Apples, leading varieties, all grades

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European Mt. Ash, Catalpa Speciosa, Amer. Elm, Sugar Maple, Carolina Poplar, White Pine, Amer. Arborvitae, Norway Spruce, Mulberry, Japan Walnut, Amer. Chestnut.

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Fruit-Tree Seedlings, Forest-Tree Seedlings,
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Apple Scions
Apple Trees

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General Assortment Nursery Stock

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IN CARLOAD LOTS

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Northern Grown Nursery Stock

We Grow a General Assortment of Trees, Shrubs, Vines, Roses and Herbaceous Perennials, Etc.

Prices Reasonable. Wholesale Trade List for the Asking.

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Wanting FRUIT TREE SEEDS and EUROPEAN Forest Tree
Seeds of the very best quality at low prices should write
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Offers of American Tree Seeds appreciated.

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We hold one of the finest stocks in England of 2 yr.
field grown Hybrid Tea Roses on the seedling
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Hardy American Rhododendrons of the best
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250,000 Manetti Stocks first grade, grown on sandy ground and guaranteed
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25,000 Pinus cembra, from 6 in. to 3 ft.

25,000 Andromeda florabunda, in all sizes up to 2 ft.

5,000 Abies parryana Kosteriana from 1 ft. to 4 ft.

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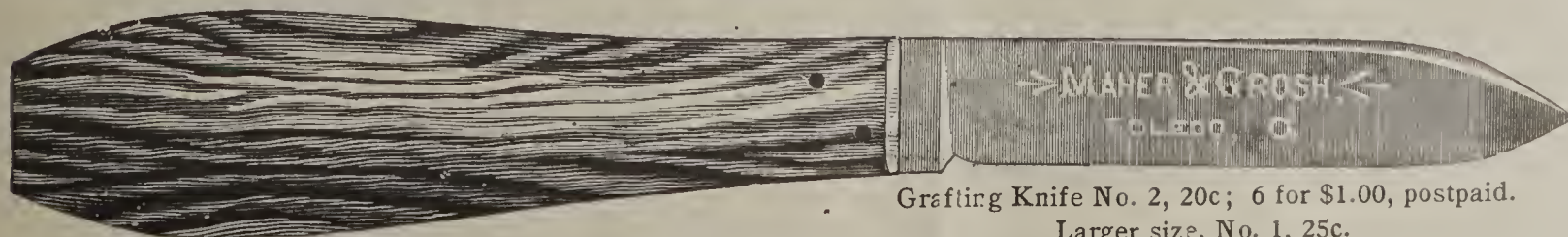
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Largest shippers to this country. All leading nurserymen are our regular customers. Orders booked now for delivery for season
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Hand Forged Razor Steel Warranted

POCKET PRUNING
KNIVES, 50c to 85c
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KNIVES 35c to 75c

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Is the only positive eradicator of San Jose Scale and other Insect Pests. Endorsed by all agricultural experiment stations.

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OFFER *for Fall 1912*

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara. Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all cleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

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We are the sole United States and Canadian agents of SEBIRE-CAUVET, MESNIL-ESNARD, (Seine-Inf.), FRANCE and offer for his account a general assortment. The prices are right and the quality of the stock is unexcelled.

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F. W. MENERAY COMPANY

Crescent Nurseries

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Station "A," Topeka, Kansas.

Fruit, Shade and Ornamental Trees

∴ FLOWERING SHRUBS ∴
APPLE AND PEAR SEEDLING
∴ FOREST TREE SEEDLING ∴

WE OFFER

For FALL 1912

Grape Vines, Currants and Gooseberries
in all varieties and Grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

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F. E. SCHIFFERLI, Fredonia, N. Y.

Vincennes Nurseries

Vincennes, Ind.

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We are pleased to offer for Fall, 1912, and Spring, 1913,

CHERRY—Two Year. All leading sour varieties.
CHERRY—One Year. General list leading sorts sour and sweets.
PEACH—One Year. 30 varieties.
APPLE—Two Year. All grades.
APPLE—One Year. Cut Backs very strong.
SILVER MAPLE. All grades.

Can furnish the above in Carload Lots or less. Also Pear, Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection invited.

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready end of September.

The Willadean Nurseries

SPARTA, KY.

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery trade, graded up to the highest standard and sure to please you.

Give us a trial order, send in your list now for quotations

WILLETT & WHELOCK

North Collins, N. Y.

WE ARE GROWING FOR THE SEASON

1912-13

1,000,000 American Sycamore,

6 in. to 3 ft.

1,000,000 Green Ash,

6 in. to 3 ft.

500,000 California Privet,

6 in. to 3 ft.

Also a large stock Alianthus, Box Elder, Catalpa Speciosa, Black Locust, Red Bud, American White and Cork Elm, Tulip, Poplar, Sweet Gum, Carolina, Lombardy and Silver Poplars, R. Mulberry, Althea (both seedlings named varieties), Berberry, Calicanthus, Deutzia, Hamamelis Virginica, Spireas in varieties, Weigelias, Yucca, Maples, Chinese Wistarias and a large variety of other stock. Send for Trade List.

Also Tree and Shrub Seeds.

Forest Nursery and Seed Co.

McMinnville, Tenn.

Seedling and Transplanted

Evergreens by the million

Arbor Vitae

Austrian Pine

Black Hill Spruce

Colo. Blue Spruce

Concolor

Engelmanii Spruce

Jack Pine

Norway Spruce

Pinus Ponderosa

Scotch Pine

White Pine

White Spruce

We have these in all sizes and ages. Also a general line of nursery stock.

Evergreen price list now ready.

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NURSERY COMPANY

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L. H. BAILEY

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Practical instructions on every subject connected with Horticulture. Four handsome quarto volumes; 2,800 original engravings, 50 full plates; 2,016 pages and 4,357 articles; Total plants accounted for 24,434.

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Franklin Davis Nursery Co.

BALTIMORE, MD.

WE OFFER FOR FALL 1912

APPLE—I and 2 year.

PEACH—Will have a nice lot of smooth trees in good assortment of varieties.

CHERRY—I and 2 year.

PEAR—I and 2 year.

ASPARAGUS—I and 2 year.

CALIFORNIA PRIVET—I, 2 and 3 year, or carload lots—fine, bushy plants.

ORIENTAL PLANES, CAROLINA POPLARS, NORWAY MAPLES, SILVER MAPLES.

AMERICAN ELMS and a general assortment of ornamental stock.

SEND IN A LIST OF YOUR WANTS

WANTS.

We want small Evergreens and Shrubs for transplanting—What can you offer?

WASHINGTON, September 16

The department of Agriculture today proclaimed a quarantine against the importation of white pine, western white pine, sugar pine, etc., from Great Britain, France, Belgium, etc. The quarantine, effective today, is designed to prevent enormous damage to coniferous trees in the event of the introduction of the disease known as white pine blister rust.

—From the *Boston Herald*, Sept. 17, 1912

BUY OUR

American Grown White Pine

raised from healthy AMERICAN SEED here at

LITTLE TREE FARMS

Near Boston, FRAMINGHAM, MASS.

Our plants are absolutely free from disease, vigorous and hardy. Exceptionally low prices on **WHITE PINE**

37,000 twice transplanted.....	18 to 24 inches	25,000 transplanted (heavy)	4 to 8 inches
69,000 " "	12 " 18 "	90,000 "	4 " 8 "
4,000 " "	8 " 12 "	99,000 seedlings	12 " 18 "
67,000 transplanted.....	2 " 3 feet	755,000 "	8 " 12 "
127,000 "	18 " 24 inches	52,000 "	6 " 8 "
148,000 "	12 " 18 "	1,139,000 "	4 " 8 "
227,000 "	8 " 12 "	2,772,000 " (heavy)	3 " 6 "
109,000 "	6 " 8 "	90,000 " two-year	

Millions of other Pines (Scotch, Pitch, Banks); Spruces (Douglas, White, Red, Blue, Norway); Oaks (Red, Pin, Black); Ash, in the ground to be dug for immediate shipment. Write us.

AMERICAN FORESTRY CO., THEODORE R. BORST, Forest Engineer

C. & J. Well KNOWN GROWN Shrubs and Roses

Althea Banner, 4 to 5 ft.
Banner, 18 to 24 in.
Banner, 5 to 6 ft.
Banner, 2½ to 3 ft.
Althea Bicolor, 18 to 24 in.
Bicolor, 3 to 3½ ft.
Bicolor, 3 to 4 ft.
Althea Jeane d'Arc, 3 to 4 ft.
Jeane d'Arc, 18 to 24 in.
Jeane d'Arc, 5 ft.
Jeane d'Arc, 2 to 3 ft.
Jeane d'Arc, 4 to 5 ft.
Althea Meehani, 8 to 10 in.
Meehani, 12 to 18 in.
Meehani, 18 to 24 in.
Althea Pink, 18 to 24 in.
Pink, 2 to 3 ft.
Pink, 3 to 4 ft.
Althea Red, 18 to 24 in.
Red, 3 to 4 ft.
Althea Violet, 12 to 18 in.
Violet, 18 to 25 in.
Azalea Mollis Yellow, 18 to 20 in.
Azalea Mollis Named Sorts, 18 to 20 in.
Mollis, Red, 18 to 20 in.
Mollis, 6 to 8 in.
Barberry Thunbergii, 18 to 24 in.
Thunbergii, 12 to 18 in.
Thunbergii, 6 to 8 in.
Crinnells, 3 to 4 ft.
Crinnells, 2 to 2½ ft.
Crinnells, 3 ft.
Deutzia Crenata, 2½ to 3 ft.
Crenata, 3 to 6 ft.
Crenata, 4 to 5 ft.
Deutzia Gracilis, 8 to 10 in.
Gracilis, 10 to 15 in.
Deutzia Gracilis Rosea, 10 to 12 in.
Gracilis Rosea, 2 to 3 ft.
Gracilis Rosea, 2 to 2½ ft.

Deutzia Lemoinii, 12 to 14 in.
Lemoinii, 2 ft.
Deutzia Pride of Rochester, 2½ to 3 ft.
Euonymus Japonica, 2 yr., 12 in.
Radicans, 2 yr., 12 in.
R. Variegata, 2 yr., 12 in.
Forsythia Golden Bell, 12 to 15 in.
Golden Bell, 3 to 4 ft.
Hydrangea Paniculata Grandiflora,
3 to 3½ ft.
Paniculata Grandiflora,
2½ ft.
Paniculata Grandiflora,
12 to 18 in.
Hydrangea Arborescens, 12 to 18 in.
Arborescens, 2 to 3 ft.
Philadelphus Single, 2 to 3 ft.
Single, 4 to 5 ft.
Single, 3 to 4 ft.
Philadelphus Double, 2 to 3 ft.
Double, 4 to 5 ft.
Privet California, 18 to 24 in.
California, 5 to 6 ft.
California, 12 to 18 in.
California, 2 to 3 in.
Spirea Anthony Waterer, 5 to 6 in.
Anthony Waterer, 12 in.
Anthony Waterer, 2 ft.
Spirea Prunifolia, 3 to 4 ft.
Prunifolia, 12 to 15 in.
Prunifolia, 3 to 3½ ft.
Prunifolia, 3 to 4 ft.
Spirea Van Houttei, 10 to 12 in.
Van Houttei, 3 to 4 ft.
Van Houttei, 4 to 5 ft.
Van Houttei, 12 to 18 in.
Spirea Forbelli, 2 ft.

Viburnum Opulus, 4 to 6 ft.
Opulus, 3 to 4 ft.
Opulus, 18 to 24 in.
Viburnum Plicatum, 3 to 4 ft.
Plicatum, 5 to 6 ft.
Plicatum, 3 to 3½ ft.
Plicatum, 12 to 18 in.
Weigela Candida, 2 to 3 ft.
Candida, 5 to 6 ft.
Eva Rathke, 4 ft. xxx
Eva Rathke, 2½ to 3 ft.
Eva Rathke, 2 to 2½ ft.
Eva Rathke, 2 to 3 ft.
Eva Rathke, 12 to 18 in.
Eva Rathke, 18 to 24 in.
Eva Rathke, 4 to 6 ft.
Eva Rathke, 3 to 4 ft.
Rosea, 18 to 24 in.
Rosea, 3 to 4 ft.
Rosea, 4 ft. xxx
Variegata, 12 to 18 in.
Variegata, 3 to 4 ft.

CLIMBERS

Honeysuckle Heckrottii, 3 ft.
Heckrottii, 8 to 12 in.
Honeysuckle Red-Coral, 3 ft.
Red-Coral, 8 to 10 in.
Red-Coral, 3 to 4 ft.
Honeysuckle Evergreen, 18 to 24 in.
Evergreen, 2 to 3 ft.
Honeysuckle Halliana, 18 to 24 in.
Honeysuckle Tatarica Yellow, 2½ to 3 ft.
Honeysuckle Golden, 12 to 18 in.

ROSES—Climbers

Universal Favorite, 3 yr.
Violet Blue, 3 yr.

Violet Blue, 1 yr.
American Pillar, 1 yr.
American Pillar, 2 yr.
American Pillar, 3 yr.
Dr. Van Fleet, 1 yr.
Dr. Van Fleet, 2 yr.
Miss Messman, 1 yr.
Excelsa, 1 yr.
Lady Gay, 1 yr.
Hiawatha, 1 yr.
Hiawatha, 2 yr.
White Dorothy, 2 yr.
White Dorothy, 1 yr.
Gardenia, 1 yr.
Dorothy Perkins, 1 yr.
Flower Fairfield, 1 yr.
White Rambler, 3 yr.
No Light, 1 yr.
No Light, 2 yr.
No Light, 3 yr.
Farquhar, 1 yr.
Farquhar, 2 yr.
Farquhar, 3 yr.
Ruby Queen, 1 yr.
Ruby Queen, 2 yr.
Ruby Queen, 3 yr.
May Queen, 1 yr.
May Queen, 3 yr.
Alba Rubifolia, 1 yr.
Evangeline, 1 yr.
Evangeline, 2 yr.
Evangeline, 3 yr.

SPECIALS

Sir Thomas Lipton, 3 yr.
Sir Thomas Lipton, 3 to 4 ft.
Rugosa Magnifica, 12 to 18 in.
Alice Aldrich, 18 to 24 in.

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THE CONARD & JONES CO., WEST GROVE, PA.

ORNAMENTAL STOCKS

NURSERIES
420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.
300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
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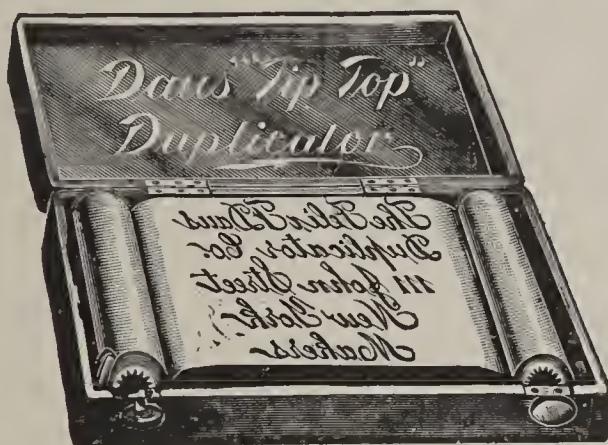
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G. W. Van Gelderen"**

(Gloire de Dyon X Captain Christy)

A perfect hardy H. T. Rose; color creamy-rose, very free flowering, a strong grower, also easy to force. *Ready for shipment after October 1, 1912.*

V.G.'S
SPECIALTIES

Azaleas, Buxus, Conifers, Evergreens,
Magnolias, Paeonias, Rhododendrons,
Roses, Vines, etc. : : : : : : :

Ask for our General Catalogue, and description and prices of our famous new Rose.

G. W. VAN GELDEREN
BOSKOOP, HOLLAND

English Nursery Stock

Extensive stock of *RHODODENDRONS*, English grown, hardy kinds a specialty. *These are specially grown for America.* Bushy, well-grown plants, budded, 1 $\frac{1}{2}$ to 2 ft., 2 to 2 $\frac{1}{2}$ ft., and a few kinds 2 $\frac{1}{2}$ to 3 ft. *ANDROMEDA, AZALEA, KALMIAS, etc.,* a good stock. *HARDY CONIFERS*, a large stock. Low prices can be quoted on all Conifers. *ORNAMENTAL EVERGREEN TREES, FRUIT TREES*, trained and in pots. *TRANSPLANTED FOREST TREES, FRUIT TREE STOCKS, etc.*

ROSES, dwarf and standard—all leading kinds in quantity. *MANETTI STOCKS*, 1-yr., fine.

The stock is in excellent condition. *First grade stock only supplied.* Thirty years successful trading in the States. No agents. Write direct for wholesale catalogue.

Walter Charles Slocock

Goldsworth Nursery

Half an hour's rail from London by
L. & S. W. Ry., Main Southampton Line.

WOKING
Surrey, Eng.

When writing to Advertisers please mention The National Nurseryman.

“Harrison's Trees Sell Themselves”

We frequently hear this statement from dealers who have been sending out trees grown in Harrison's Nurseries. The customer is pleased with the stock, tells his neighbor about it, and then you get another order for “trees like those you sent to Blank.”

There are reasons why “Harrison's Trees sell themselves.” First of all, we put a good many years of “learning how” to grow trees into every lot we send out. The nursery rows are cultivated thoroughly; the trees are trimmed and trained when they need it; they are watched all summer to see that nothing “goes wrong,” and that they grow into sturdy, healthy specimens that will help to make your reputation as a man who sells good trees.

The soil at Berlin is a loose, sandy loam—just the kind of dirt the roots like to run in—and the root system of our trees is way ahead of those grown in heavy soil. The climate here is mild the year round. Scale and insects give no trouble—the salt air seems to keep them off the trees and plants. Come to Berlin and see our nurseries—you will appreciate the work we are doing and realize more than ever that Harrison's trees are the trees that “make good.”

APPLES

One Year Budded

American Golden Russett.....	1200
Alexander	1200
Baldwin	27000
Ben Davis.....	7000
Benoni	250
Belleflower	300
Bismarck	100
Coffelt Beauty	100
Cooper's Market.....	100
Carthouse	150
Chenango Strawberry.....	225
Dominie	250
Duchess	6500
Delicious	275
Ensee	300
Early Colton	125
Early Harvest.....	3000
Early Strawberry.....	250
Fall Pippin.....	250
Fanny	100
Fallowater	750
Fourth of July.....	1000
Grimes' Golden.....	10000
Gravenstein.....	2500
Golden Beauty	250
Gano	6000
Ingram	200
Jeffries	100
Jonathan	7000
Kennard's Choice.....	150
King	2500
Longfield	100
Lankford	75
Lawver.....	100
Limberville	150
Myrick	275
Missouri Pippin.....	300
Mammoth Black Twig.....	12000
Mann	100
McIntosh Red.....	10000
Maiden's Blush.....	650
Nero	1400
Northern Spy.....	3000
N. W. Greening.....	1500
Porter.....	100
Pewaukee	80
Paradise Winter Sweet.....	1100
Rome Beauty.....	16000
Rawles Janet.....	150
Red Astrachan.....	4000
Rolfe	175
Red June.....	250
R. I. Greening.....	1200
Rambo	1200
Stayman's Winesap.....	60000
Smoke House	1000
Smith's Cider.....	250
Scott's Winter.....	200
Salome	150
Springdale	150
Stark	3000
Sweet Bough.....	1000
Spitzenburg	1250
Tallman's Sweet.....	1000
Wealthy	8000
Walbridge	250
Winesap	16000

APPLES—Continued

Wolf River.....	3000
William's Early Red....	3000
Winter Banana.....	3500
Wagner	900
York Imperial.....	60000
Yellow Transparent.....	16000

CRAB APPLES

Hyslop	275
Martha Crab.....	250
Transcendent	2000

APPLES

Two Year

Aiken	50
A. G. Russett.....	400
Arkansas Black.....	200
Apple of Commerce.....	40
Baldwin	12000
Ben Davis.....	4000
Bismarck	30
Benoni	40
C. R. June.....	400
Carthouse	40
Coffelt	25
Cooper's Market.....	50
Canada Red.....	25
Chenango	50
Dutchess	2500
Dominie	50
Early Strawberry.....	200
Early Harvest.....	2500
Early Melon.....	40
Fallowater	500
Fanny	20
Flora Bell.....	40
Golden Sweet.....	150
Gravenstein.....	2000
Hubbardston.....	1000
Ingram	40
Jeffries	40
King	150
Kinnards	40
Lawver.....	150
Longfield	30
Late Raspberry.....	45
Jonathan	1250
Missouri Pippin.....	900
Mann	400
Myrick	50
Nero	1500
N. W. Greening.....	2500
Opalescent	75
P. W. Sweet.....	450
Paynes	40
Pewaukee	50
Rambo	500
R. I. Greening.....	2500
Roman Stem.....	30
Red Astrachan.....	4000
Sweet Bough.....	50
Smith Cider.....	400
Stark	1500
Spitzenburg	2500
Salome	25
Senator	35
Sutton Beauty	25

APPLES—Continued

Springdale	30
Townsend	40
Virginia Beauty.....	50
Walbridge	200
Wealthy	2500
Wolf River.....	1250
Winesap	4000
Winter Banana.....	750
Yellow Transparent.....	15000
Yellow Belleflower.....	500
York Imperial.....	25000

CRAB APPLES

Golden Beauty.....	1000
Hyslop	750
Transcendent	1000

QUINCES

Champion, 2-3 ft.....	500
Orange, 2-3 ft.....	500

CHERRIES

Two Year

Baldwin	1000
Black Tartarian.....	1500
Early Richmond.....	10000
Gov. Wood.....	1000
Montmorency	4000
Napoleon	1000
Schmidt	1000
Windsor	1000
Yellow Spanish.....	1000

PEACHES

One Year from Bud

Ark. Beauty.....	300
Alexander	200
Admiral Dewey.....	200
Belle of Georgia.....	25000
Beer Smock.....	2500
Bilyeu's Late.....	2500
Bray's R. R.....	250
Crosby	200
Connett's So. Ey.....	200
Captain Ede.....	200
Cornelia	50
Chinese Cling.....	250

PEACHES—Continued

Carman	15000
Chair's Choice.....	5000
Champion	5000
Crawford Early.....	2500
Crawford Late.....	5500
Elberta.....	70000
Edgemont Beauty.....	500
Engles Mammoth.....	1500
Ford's Late White.....	1000
Frances	1500
Fitzgerald	1500
Foster.....	500
Fox Seedling.....	3000
Geary's Hold On.....	2000
Gold Drop.....	250
Globe	300
Greensboro	2500
Heiley	1500
Harrison Cling.....	250
Iron Mountain.....	3000
Jackson Cling.....	200
Klondyke.....	500
Krummel's Oct.....	950
Kalamazoo	1250
Levy's Late.....	200
Late Elberta.....	250
McCollister	200
Miss Lola.....	175
Mountain Rose.....	2000
Moore's Favorite.....	1500
Mamie Ross.....	1000
Mayflower	1400
Matthew's Beauty.....	200
Marshall	200
New Prolific.....	1000
Niagara	1500
Old Mixon Free.....	500
Picquetts Late.....	250
Prize	250
Reeve's Favorite.....	2500
Ray	25000
Sneed	200
Sunrise Cling.....	250
Stinson's Oct.....	250
Salway	6000
Stump	3500
Stephen's Rareripe.....	1300
Slappy	1500
Triumph	150
Wilkin's Cling.....	1100



Harrison's Nurseries
J.G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

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W. F. HUMPHREY, PRINTER, GENEVA, N. Y.

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THE NATIONAL NURSERYMAN



NOVEMBER, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SPIRAEA VAN HOUTTEI
by the thousand.

Andorra Nurseries,
WM. WARNER HARPER, Prop.
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MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

APPLE SEEDLINGS—Fine lot, healthy and free
from disease. Special low prices until surplus
is sold.

APPLE and PEAR GRAFTS—Made to order.

APPLE TREES—in car lots. Large assortment.

ORNAMENTAL TREES—in car lots. American
Ash, American Elm, American Sycamore, Silver
Maple, Carolina, Norway and Lombardy Poplars.

Complete Line General Nursery Stock for Wholesale Trade.

CORRESPONDENCE AND INSPECTION INVITED

THE JEWELL NURSERY CO.

LAKE CITY, MINNESOTA

Wholesale Nurserymen

Established 1868

1500 Acres

SPECIALTIES FOR FALL 1912

NORWAY AND CAROLINA POPLAR

2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8, 8 to 10, 10 to 12 ft.

BOX ELDER, ASH, ELM SEEDLINGS All Sizes.

AMERICAN BASSWOOD AND SOFT MAPLE TREES

100,000 CURRANTS, Red and White.

75,000 MCINTOSH, JONATHAN, BELLFLOWER,
WINESAP, Etc., 2-year, fine stock.

THREE YEAR APPLE in all Hardy Varieties.

THREE YEAR CRAB

SNOWBALL

YELLOW DOGWOOD
HYDRANGEA

WRITE FOR SPECIAL PRICES.
LET US PRICE YOUR GENERAL WANT LIST.

Now is the time to place your orders for
Direct Importations

from European Nursery Centers

FRENCH FRUIT STOCKS

Apple, Pear, Myrobolan, Mahaleb, Maz-
 zard Seedlings, Manetti, Multiflora and
 Quince stocks. Also full line of Orna-
 mental for lining out, from Vincent Le-
 breton's Nurseries, Angers. Best pack-
 ing and grading. December or February
 shipment from France.

Boskoop, Holland, Nursery Stock

Boxwood (pyramids, bushes, standards,
 ball-shape, etc.). Roses, Tree Roses, Rho-
 dodendrons, Azaleas, Magnolias, Koster
 Blue Spruce, Evergreens, Hydrangea P.
 G., etc., etc., from Schaum & Van Tol,
 Boskoop.

DECIDUOUS TREES

Norway and Schwedler Maples, Tili-
 as, Elms, Chestnuts, Oaks, Planes, Thorns,
 etc., etc., etc., straight stems and good roots,
 careful selection, best packing from Union
 Nurseries, Oudenbosch, Holland.

Besides representing the above firms
 as Sole American Agents, we import to
 order

FROM JAPAN AND ENGLAND

English Manetti, Gooseberries 2 and 3-yr.
 (Whinham Industry, Whitesmith, etc.),
 Japanese Nursery Stock and Lilies.

BAY TREES. Standards, Pyramids and
 all shapes from Belgium, Fall or Spring
 shipment.

RAFFIA. Red Star Brand and four
 other grades; also dyed Raffia in 20 colors.

WRITE US for catalogs, special lists,
 etc., stating the class of stock you are
 interested in.

SHIPPING. We have our own Custom
 House Dept., with shipping connections
 at Havre, Hamburg, Rotterdam, Antwerp,
 Southampton, etc.

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The Import
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SIMPSON

is the name of the men who grow the finest

CHERRY

that can be produced by suitable soil, climate and
 expert knowledge.

Take a look at the stock or ask for a sample and
 be convinced of the extra quality of their

TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year
 AMERICANA PLUM ON PLUM
 COMPASS CHERRY ON PLUM

H.M. Simpson & Sons

VINCENNES, INDIANA

For Winter and Spring Orders

**WE OFFER THE FOLLOWING FROM
 OUR MAC CLENNEY NURSERY . . .**

- 4000 **Mulberries**, mostly of Hicks variety, smooth and free
 from blight.
- 15000 **Figs**, mostly of the Celeste and Lemon varieties.
- 20000 **Peach**, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.
- 25000 **Plum on Plum**, Abundance, Burbank, Wickson, Red
 June, Gonzalez, and other leading sorts. Sizes $\frac{1}{2}$, $\frac{5}{8}$,
 $\frac{3}{4}$ and 1 inch.
- 10000 **Roses**, Teas, Hybrid Teas and Climbers, all grafted very
 low on Manetti roots. Field grown.
- 6000 **Biota Aurea Nana**, sizes 18 inches up.
- 10000 **Biotas and other Conifers**, 12 inches and up. Conifers
 can be balled or shipped with naked roots.
- 25000 **Chinese Arborvitae Seedlings**, 2 and 3 year, 6 inch to
 3 ft. sizes.
- 5000 **Muscadine Grapes**.
- 20000 **Trellis Varieties Grapes**.
- 70000 **Camphor Trees**, sizes 1 to 3 ft.
- 3000 **Pot Grown Eucalyptus**, sizes 3 to 5 ft.
- 4000 **Oriental Plane**, sizes from 4 to 12 feet.
- 3000 **Texas Umbrella**, sizes from 4 to 8 feet.
- 2000 **Oleander**. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.
 Could also supply limited quantities of general list of Fruit
 and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

The Griffing Brothers Company
 JACKSONVILLE, FLORIDA

NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the United States at the

Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,
Palms and other tender Greenhouse Plants

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A FEW SPECIALS WHILE THEY LAST :

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OUR SPECIALTIES ARE

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Norway Maples

SPLENDID TREES

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APPLE QUINCE PEAR CHERRY
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A Fine Block of
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ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
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63 Years

700 Acres

TREE LILACS

Grown as STANDARDS with strong, straight stems and well-branched, well-balanced tops; forty varieties, single and double, all shades from purest white to darkest purple. A profitable *specialty* for agency and catalog houses.

J. & P. Tree Hydrangeas were the first home-grown standards on the market. Our **Tree Lilacs** are becoming even *more* popular.

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Growers of the J. & P. Specialties
Sold to the Trade only

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We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our **Biotas**—**Aurea Nana**, **Aurea Conspicua**, and **Japonica Filiformis** (see illustration); **Retinospora**, **Thuya**, and **Juniper**—all in popular sizes for the trade.

Our **Deciduous Shrubs** include **Exochorda**, **Lilac**, **Spirea**, **Althaea**, **Deutzia**, **Philadelphus**, and a very choice stock of **Teas' Weeping Mulberry**.

Broad-leaved Evergreens—**Azalea Indica** (Home-grown Plants) **Magnolia Fuscata**, **Aucuba**, **Ligustrum**, and **English Laurel**. Among our fruits, we direct particular attention to our clean, thrifty **Peach Trees**, of which we offer the leading sorts.

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Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.
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AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
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Biota Japonica Filiformis.

The Best Tree Digger on Earth



Used and Recommended by Leading
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The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

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Evergreens are our leaders — we started growing them in 1855. We chose a soil and climate that we had found best for evergreens, and we have been developing and specializing this one feature ever since. Today you can buy

Hill's Seedling Evergreens and Transplants for Nurserymen's and Dealers' Trade, Lining Out, Etc.

with every assurance that they are clean, healthy, vigorous little trees, well-grown and strictly true to name—such as you can grow into first-class stock for the most particular trade. We grow them here by the millions, and our facilities are of the very best. Write for our Wholesale Catalog.

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Largest Nurseries in Europe

2000 ACRES

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1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices.
Catalogs free—
4. When in Europe come and see our nurseries—

Willis Nurseries

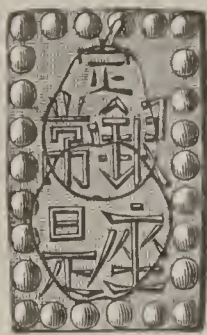
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OF NURSERY STOCK

Apple, Peach
Red Dutch Currants
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Catalpa Speciosa Seedlings
Apple Seedlings
Japan Pear Seedlings and
Oklahoma Peach Seed

A. Willis & Co.

OTTAWA, KANSAS

Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Fall of 1912 and Spring of 1913 in large quantities as usual:

SPECIALTIES

- APPLES**—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.
- PEARS**—Kieffers, one and two years old. A much smaller crop than heretofore.
- CHERRIES**—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.
- CHERRIES**—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.
- PEACHES**—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.
- ROSES**—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.
- PRIVET**—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.
- PECAN SEEDLINGS**—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,
in several hundred
kinds and varieties

ROSES, in all kinds
and varieties

RHODODENDRONS, Hardy,
ENGLISH HYBRIDS,
Maximum and Catawbiense

BOXWOOD, in all shapes,
forms and sizes

HARDY AZALEAS, in all
colors and varieties

HEDGE PLANTS, in all
popular kinds

FLOWERING SHRUBS, in
bush and standard forms
in hundreds of kinds
and varieties

SHADE TREES, in hundreds
of useful and attractive
varieties

MAGNOLIAS and other
FLOWERING TREES

WEeping and STANDARD
TREES, in many varieties

JAPANESE MAPLES, in all
varieties and colors

HARDY TRAILING VINES
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HARDY VINES and CLIMBERS
in pots

SPRING and SUMMER
FLOWERING BULBS, ROOTS
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PALMS and BAY TREES by
the thousands

FRUIT TREES,
home-grown, imported,
DWARF and TRAINED

SMALL FRUITS, in all
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kinds

OLD-FASHIONED, Hardy
FLOWERING PLANTS, in
thousands of kinds and
varieties

PAEONIAS, IRIS, PHLOX
FERNs,
and HARDY GRASSES

KITCHEN
HERBS and ROOTS

RUTHERFORD PARK LAWN
GRASS SEED

AUTUMN BULBS, Dutch,
French and Japanese kinds

Interior and Exterior
DECORATIVE PLANTS, in
a large variety

PLANT TUBS, in all shapes and
sizes. Ask for special list

VISITORS to our nurseries
are always welcome

SEND IN YOUR LISTS FOR
QUOTATIONS

Nurserymen, Florists and Planters
RUTHERFORD, N. J.

Fruit Seeds and Seedlings

We offer a complete list of FRUIT SEEDS and SEEDLINGS this year. Send for a copy of our list showing varieties, sizes and prices.

Tree and Shrub Seeds

Our complete price list of DECIDUOUS and EVERGREEN TREE and SHRUB SEEDS is now ready. This list will interest every Nurseryman. It contains a full list of varieties and prices. A copy will be sent on request.

OUR WHOLESALE TRADE LIST OF
HARDY ORNAMENTAL NURSERY
STOCK FOR FALL 1912 WILL BE
READY ABOUT SEPTEMBER 15TH.
BE SURE YOU GET A COPY.

THOMAS MEEHAN & SONS

WHOLESALE NURSERYMEN AND SEEDSMEN

DRESHER, PA.

BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings

Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

C. M. HOBBS & SONS

BRIDGEPORT, IND.

California Privet

Over a million plants in one and two year old grades

Berberis Thunbergii

To meet the fast increasing demand for this popular hedge plant we have been growing a very large supply.

BERBERIS THUNBERGII SEEDLINGS

Plant for Profit

Sure Money-Maker

Our General Line of Nursery Stock is most complete, including Fruits of all kinds, Evergreens, Shrubs, Etc.

FALL TRADE LIST IS NOW OUT. IF YOU HAVEN'T A COPY SEND FOR ONE

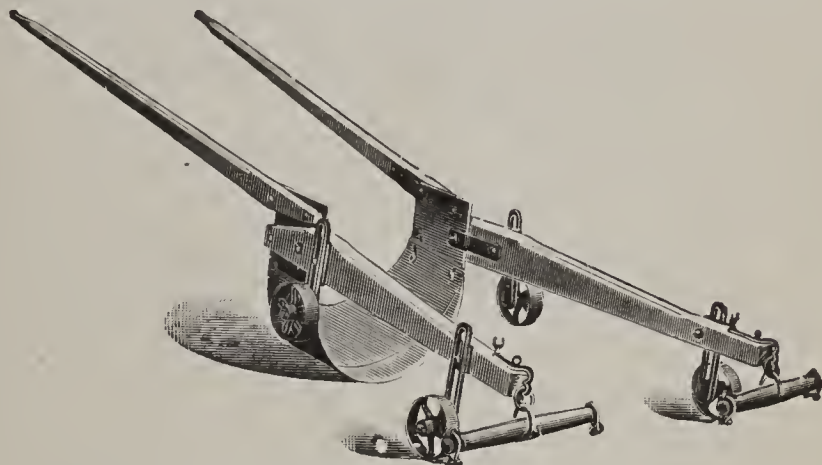
C. R. BURR & CO.

Growers of Fine Nursery Stock MANCHESTER, CONN.

1857 - 1912

BRAGG'S COMMON SENSE TREE DIGGER

REPAIRS ALWAYS ON HAND. SEND FOR CATALOGUE



Digger gets all the roots at the rate of 20 to 40 thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

FOREST TREES FRUIT STOCKS

Shipments of over 200 Million of Trees Annually

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J. HEINS' SONS

HALSTENBEK, No. 152

Near Hamburg, Germany

Largest Forest Tree Nurseries in Europe.

Please write for Catalogue and Forest Planter's Guide to our American Agent:

OTTO HEINECKEN

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Have you seen and examined the quality and finish of our

Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

35TH YEAR

Pan Handle Nurseries

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringeas	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

J. K. HENBY & SON
GREENFIELD, IND.

APPLE TREES

We can supply in earload lots or less, in one or two-year-old, the following in strictly No. 1 Grade:

Ark. Blacks	Newtown
Baldwin	Ortley
Delicious	Spitzenburg
Gravenstein	Wagner

We also supply scions in the above variety for early shipment.

ALSO PRIVET IN QUANTITY.

Ideal Fruit and Nursery Co.
HOOD RIVER, OREGON

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

HIGH
GRADE



LARGE
VARIETY

Correspondence solicited. Price list upon request.

W. B. WHITTIER & CO.
South Framingham, Mass.

WE OFFER FOR FALL, 1912,

Peach Trees in car lots

NORWAY MAPLE
SILVER MAPLE

CALIFORNIA PRIVET,
1 year

325,000 APPLE, 1 year, grafts and buds,
in COMMERCIAL VARIETIES

The Greenbrier Nursery Co., Inc.
Greenbrier, Tenn.

SCARFF'S PLANTS

equal to any
on the market

Small Fruit Plants our specialty for 25 years. 100,000 Transplanted Raspberry, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

W. N. SCARFF

NEW CARLISLE, OHIO

FOREST TREES

SEEDLINGS AND TRANSPLANTS

in quantities for retimbering or lining out; healthy stocks, from the very extensive and well kept Wholesale Nurseries of

H. H. PEIN, Halstenbek, Germany

for latest trade list and all other inquiries address our sole American agents:

August Rölker & Sons

P. O. Box 752, or
31 Barclay Street

New York



Small Fruit Plants for the Nursery Trade, Fall 1912

Blackberry Rootcutting Plants, Eldorado, Erie, Ohmer, Rathbun. Raspberry, all leading varieties. Houghton Gooseberry Plants. Two hundred thousand Gooseberry Layer Plants. Asparagus, one, two and three year roots. One hundred thousand Rhubarb, one and two year roots, also divided. Horseradish Sets, etc. Write for Price List. P. D. BERRY, Dayton, Ohio

WE ARE GROWING FOR THE SEASON
1912-13

1,000,000 American Sycamore,
6 in. to 3 ft.

1,000,000 Green Ash,
6 in. to 3 ft.

500,000 California Privet,
6 in. to 3 ft.

Also a large stock Alianthus, Box Elder, Catalpa Speciosa, Black Locust, Red Bud, American White and Cork Elm, Tulip, Poplar, Sweet Gum, Carolina, Lombardy and Silver Poplars, R. Mulberry, Althea (both seedlings named varieties), Berberry, Calicanthus, Deutzia, Hamamelis Virginica, Spireas in varieties, Weigelias, Yucca, Maples, Chinese Wistarias and a large variety of other stock. Send for Trade List.

Also Tree and Shrub Seeds.

Forest Nursery and Seed Co.
McMinnville, Tenn.

Seedling and Transplanted Evergreens by the million

Arbor Vitae
Austrian Pine
Black Hill Spruce
Colo. Blue Spruce
Concolor
Engelmanii Spruce

Jack Pine
Norway Spruce
Pinus Ponderosa
Scotch Pine
White Pine
White Spruce

We have these in all sizes and ages. Also a general line of nursery stock.

Evergreen price list now ready.

**SHERMAN
NURSERY COMPANY**
CHARLES CITY, IOWA

Cyclopedia of American Horticulture

L. H. BAILEY

IN FOUR VOLUMES

The NATIONAL NURSERYMAN has made special arrangements with the publishers of this great work and now offers it to Nurserymen on *special easy monthly terms*, \$2.00 per month for ten months. The work shipped by express prepaid on receipt of first installment and coupon below filled out.

Practical instructions on every subject connected with Horticulture. Four handsome quarto volumes; 2,800 original engravings, 50 full plates; 2,016 pages and 4,357 articles; Total plants accounted for 24,434.

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218 Livingston Building Rochester, N. Y.

Franklin Davis Nursery Co.

BALTIMORE, MD.

WE OFFER FOR FALL 1912

APPLE—I and 2 year.

PEACH—Will have a nice lot of smooth trees in good assortment of varieties.

CHERRY—I and 2 year.

PEAR—I and 2 year.

ASPARAGUS—I and 2 year.

CALIFORNIA PRIVET—I, 2 and 3 year, or carload lots—fine, bushy plants.

ORIENTAL PLANES, CAROLINA POPLARS, NORWAY MAPLES, SILVER MAPLES.

AMERICAN ELMS and a general assortment of ornamental stock.

SEND IN A LIST OF YOUR WANTS

WANTS.

We want small Evergreens and Shrubs for transplanting—What can you offer?



CATALPA SPECIOSA SEEDLINGS

DO YOU WANT THE BEST APPLE SEEDLINGS

Your money can buy? We can furnish them. We have been growing Apple Seedlings for twenty-eight years and think we know what it takes to make good Apple Seedlings. We find that one important part of the business is often overlooked. That is, to keep the foliage in a healthy condition. Seedlings with foliage damaged either by insects or fungus diseases cannot have a strong and vigorous root. Their vitality is weakened and they make poor budding or grafting stock. Our seedlings have been sprayed throughout the entire growing season and the foliage is in perfect condition, insuring perfect root development. Grading and sorting will be done by experienced workmen, under our personal supervision. Ask for sample of seedling. We shall be glad to send it by mail or prepaid express.

JAPAN PEAR SEEDLINGS

CATALPA SPECIOSA

We gather our own Catalpa seed and know them to be genuine Speciosa. Plants are grown on upland and are all well ripened and stocky.

GRAFTS

We are prepared to make Apple and Pear Grafts, whole or Piece Root.

APPLE TREES, 1 and 2 years,
PEACH TREES, CHERRY TREES,
KIEFFER PEAR, 1 year

GOOSEBERRIES CURRANTS
SHADE TREES FLOWERING SHRUBS
FOREST TREE SEEDLINGS

J. H. SKINNER & CO.

NORTH TOPEKA, KANSAS



APPLE SEEDLINGS

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., NOVEMBER, 1912

No. 11

PIN OAKS

The subject of our illustration is an avenue of Pin Oaks, *Quercus palustris* growing in Fairmount Park, Philadelphia. They were planted about the fall of 1880, under the superin-

cubic yard of soil was taken out of each hole, a load of good top soil was hauled for each tree, and this was used for filling in around the roots. The soil that was taken out of the holes



PIN OAKS IN FAIRMOUNT PARK, PHILADELPHIA

tendency of the late Charles Miller, the noted landscape gardener, who was at that time superintendent of the park. The trees at the time of planting were about ten to twelve feet high, or one and one-half to two inch caliper, and came from the nursery of Thomas Meehan & Sons.

The trees now average 18 inches in diameter, two feet from the ground, and are wonderfully uniform in habit and size, they are set 25 feet apart.

It speaks well for the selection of the tree for the position and thorough workmanlike job of planting, as well as subsequent care.

Speaking with an old horticulturist, who was familiar with the operation of planting them, he informed the writer that a

was banked up around the tree, as a protection during the winter, and was removed and hauled away the following spring.

Although planted in the fall not a tree missed.

Much can be said in favor of the Pin Oak for avenue and street planting. For a hard wooded tree they are fast growers, but rather slow in starting after transplanting, but this is often due to improper handling.

A great many are being used on the streets of different cities. At Washington, D. C., they are freely used in the newer sections, and in time will add much to the beauty of that city, but why those in charge have allowed the leaders to be cut back it is hard to say, as the Pin Oak is very slow

to form a new leader and when cut back at the time of transplanting often permanently cripples the tree. It is next to impossible to prune the side branches too severely as long as the leader is left untouched. As far as the habit of the Pin Oak is concerned, it is more like a spruce or fir and just as impatient of losing its leader. It has a naturally straight trunk, and the branching habit is very similar, being very regular and uniform. The branches have a drooping habit or downward tendency, which not only adds to its beauty but gives strength in case of ice storms.

The Pin Oaks in Fairmount Park were little damaged by the ice storms of a few years back, which proved so disastrous to many other kinds of trees in the neighborhood.

Pin Oaks are found growing wild from Massachusetts to Maryland, west to Minnesota, Eastern Kansas and Arkansas and usually in low ground. Under cultivation the territory could be very much extended, and while it naturally grows in low-lands, it thrives well in well drained situations. The position where the trees illustrated are growing in Fairmount Park is known as the Belmont Plateau, naturally high and well drained.

THE FLORISTS' AND NURSERYMEN'S ASSOCIATION OF MONTANA

A very important meeting of the Florists' and Nurserymen's Association of Montana was held during the past week at the State Nursery Co.'s office. There was a large and representative gathering of the members from different parts of the State, and various subjects of interest to the organization were thoroughly and intelligently discussed.

The following officers were unanimously re-elected: T. E. Mills, president; D. J. Tighe, vice-president, and E. A. Calmettes, secretary and treasurer, and committees were appointed to promote the welfare and advancement of the organization during the ensuing year.

General dissatisfaction was expressed at the very inadequate accommodation provided by the State Fair Commission for housing and exhibiting horticultural products, and as these products combine one of the principal industries of the State, giving employment to thousands of workmen, who by their intelligent and scientific methods of cultivation, are placing Montana in the ranks of the great fruit producing states of the country. It was the consensus of opinion that better accommodations should be provided.

After thoroughly discussing the matter the following resolution was unanimously adopted:

"Resolved, That it is the sense of this Association that the facilities for the exhibition of horticultural products at the State Fair are totally inadequate and are a disgrace to the great State of Montana, and that many exhibitors are dis-

couraged from making displays of tender products by the danger of losing them, and resolved that as the horticultural industry is increasing from year to year, and as the displays of horticultural products attract thousands of visitors to the fair, therefore,

Be it resolved, that it is the sense of this association, that the Thirteenth Legislative Assembly be petitioned to appropriate money to build a Horticultural Hall for the display of the horticultural products of Montana in a manner befitting the importance of this great industry in the State."

It is a fact that as the display had to be in a tent that was wholly inadequate to protect the exhibits from the inclemency of the weather and where even a light frost would destroy the exhibits, many of the growers refused to run the risk of losing their stock, and even those who exhibited this year expressed themselves as unwilling to run the risk another year.

Owing to the fact that the Blight is affecting some orchards in irrigated districts, and wishing to prevent as much as possible, its further spread, the following resolution was also adopted:

"Resolved, That the members of this Association discourage the planting of Alexander and Transcendent crab apples in irrigated districts owing to the liability of these varieties to Blight."

After the meeting the company was entertained at luncheon by Mr. T. E. Mills of the State Nursery Co.



PROFESSOR E. R. LAKE

AMERICAN POMOLOGICAL SOCIETY

Professor E. R. Lake, who succeeds the late Professor Craig as secretary of the American Pomological Society, is a man of considerable experience in this kind of work and brings to his new duties a full knowledge of what it means to do the work of a secretary of a live organization. Just

in the prime of life, with an active interest in all that pertains to fruit growing, familiar with the scientific and practical phases of the subject, a tireless worker with a pleasing personality; enthusiastic and sanguine he is a worthy successor of his late friend Professor Craig, and will strive in every way to maintain the high standard of service set by this old and highly respected organization.

Secretary Lake's address is 3333 20th St., N. W., Washington, D. C.

E. Y. TEAS RETIRES

We have just sold out our nursery and floral stock, every item to be removed after fall sales. I am in my eighty-third year, after sixty-five years in the business am full willing to retire. My son will engage in another line.

I am a charter member of the National Nurseryman's Association, have always been in touch with its interests and leading members. I regret on some accounts to drop out but such seems necessary.

E. Y. TEAS.

PROPAGATION OF HERBACEOUS PERENNIALS

SEED SOWING

By WILLIAM LAMB

This group of plants is so large and varied that it would be impossible to give fixed rules and methods that would apply equally well to them all, at the same time they do fall into groups by which they may be considered intelligently and to which general principles may be applied.

A thorough plantsman can usually tell by the look of a plant if it is possible to propagate it from cuttings, or if it will be necessary to layer, bud, graft or by division, or if it will come true from seed.

Propagation by seed is the most natural method and a great majority of Herbaceous Perennials may be propagated in this manner.

There is a decided advantage in having a greenhouse that can be used for propagating perennials, operations can be started in January, and in the case of certain cuttings, early in December.

The greenhouse requires no special construction, so long as it is light and the temperature can be kept to about 55 degrees at night in cold weather.

Seed boxes should be made three inches deep and a uniform size to fill the entire space on the bench, so no room may be wasted. If for any reason the seed boxes must be shifted or the seedlings become large enough to prick off, the boxes can be readily closed up or others set in their places. When making boxes always allow for drainage by leaving cracks between the boards or bore holes in them.

When preparing the seed boxes put a layer of rocks in the bottom, then about one inch of well rotted manure after which fill with screened soil, level with the top of the box. Use the fingers to press the soil down firm and even, the center will be found firm enough, work the soil toward the corners when it is loose. When ready for sowing the seed, the surface of the soil should be level and about one-half inch below the top edge of the box.

Judgment must be used as to how thick seed should be sown. Large seed, such as *Lupinus polyphyllus*, require more space than small seed like *Heuchera sanguinea*.

A box 16 inches by 19 inches will produce three or four hundred *Lathyrus latifolius*, while the same box would grow almost as many thousand *Campanula carpatica* seedlings ready for pricking off or transplanting.

After sowing the seed, press it into the soil with a small piece of smooth board then all the seed will be about the same depth and if covered evenly with fine screened soil, most of the little seedlings will break through the ground at the same time.

Wooly or winged seed, such as *Anemone Pulsatilla*, *Gaillardia*, *Echinops*, etc., can not be pressed into the soil like *Aquilegia*, *Campanula*, *Lychnis* and other hard seed and require more soil for covering.

When sowing seed outside, a good rule to follow is to cover the seed with soil, a depth equal to the thickness of the

seed. This is not necessary inside, especially if the seed be pressed down evenly with a board; harm can only come from watering improperly.

A thorough watering should be given with a can and fine rose, after sowing the seed and the box has been set on the bench or in the place where it is going to remain while the seed is germinating. Never handle a box of seed just after watering, as a crust is sure to form on top of the soil. Nothing else but a can and fine rose should ever be used when watering seed boxes or small seedlings.

Shade the seed boxes with paper until the seedlings begin to break through the soil. The shade keeps the soil moist, helps to prevent the covering of soil forming a crust on top of the seedlings, and seed will germinate more quickly in the dark.

The shade must be removed when the seedlings begin to break through the soil or they will grow lanky and damp off.

Begin in January by sowing seed that will germinate quickly, such as *Bellis perennis*, *Myosotis palustris*, *Alyssum saxatile*, etc., follow every couple of days by sowing a few more boxes of seed, so they will not all be ready for pricking off about the same time. This work can then be taken care of without extra help until work begins outside, about the first of March.

While it requires two or three weeks for seed to germinate in January, one or two weeks is sufficient time to germinate the same seed in the latter part of February and March.

It is best to sow seed of new plants and very small quantities of seed about the first of March, for the largest percentage of seed to germinate. I have found a great many kinds of seed will produce the greatest percentage of seedlings if sown outside a couple weeks after it has ripened on the plants.

Always allow for two or three sowings of the same kind of seed. Sow about one-third of the packet of seed at the first sowing, in case of failure through dull weather or other causes, enough will be left to try again, when the weather is more favorable. There are more clear days as spring approaches and the sun gives more heat each day.

The temperature should not go below 55 degrees at night and 65 degrees in the day. The ventilators should be opened every day, if only for a short time, no matter how cold it may be outside. This will help to prevent the young seedlings from damping off, especially in January and February when there are so many dull days. It freshens the inside atmosphere and helps to keep down a large family of Aphis.

The seedlings will grow so thick at times as to raise the soil in a crust, instead of pushing through it. This crust is formed of the fine soil used when covering the seed at the time of sowing. This crust must be taken off to save the seedlings; if it will not wash down between the little plants after water-

ing lift it off with a thin piece of wood, a label is usually most convenient.

Seedlings are ready for pricking off or transplanting, when the first set of leaves have formed, after the seed leaves.

Very small seedlings such as *Lobelia*, *Astilbe*, *Campanula*, etc., are best left to grow until they are large enough to handle, before an attempt is made to transplant them. If seedlings grow too thick and begin to damp off, have them pricked off at once. An experienced boy will transplant some very small seedlings and they will grow too.

Count on getting twelve hundred good seedlings from each box of seed sown and one hundred good plants from each box of seedlings, when they are ready for potting or planting out.

For pricking off seedlings, use the same size boxes as for sowing seeds, they may be shifted about and fill all the space on the bench.

A box 16" x 19" will hold, as a rule, ten rows of plants and twelve plants to the row or 120 plants. Plants from these boxes will stand potting into 2½" and 3" pots, if intended for selling as pot plants in April and May. Some small seedlings can be planted more thickly, those with narrow foliage like *Tritoma* and plants with small foliage. Young plants can be kept growing in these boxes, in good condition for planting out in the open ground, a period of six to eight weeks.

When room becomes scarce in the greenhouse, these boxes of plants may be placed under the benches for a short time, until the weather is favorable to shift them to the cold frames, where they should be left to harden off before planting out in the ground.

After each box of seedlings is pricked off, set it on the greenhouse bench, where it is to remain while the plants are growing. Give a thorough watering with the can and fine rose, then shade with paper for a few days until the young plants begin to grow and can stand the sunlight without drooping. Shade a little later each day and uncover a little earlier, this helps the plants to become accustomed to the sun in less time.

Weeds should be picked out as soon as they are large enough to pull. Naturally the weeds grow best and if allowed a good start, a crop of weak plants is the result.

Keep the surface of the soil loose by drawing an eight-penny nail, back and forth, between the rows of plants, this allows the water to settle through the soil, to the roots instead of laying on top.

Much can be said in favor of growing plants from seed, in boxes until they are ready for planting out in the open grounds, especially if they are to be sold as field grown plants.

They occupy much less room than if grown in pots, a large item when propagating stock in the greenhouse. The pots and all the time it would require to handle, in the operation of potting is saved.

They are shifted from the greenhouse to the frames or place of planting in less and instead of hundreds of empty pots to gather and store away in bins, there are a few boxes.

When planting they can be handled more readily than pot plants, if knocked out of the boxes properly, in one sod. Then as much as the planter can handle with one hand, is

taken from the sod, the separate plants being broken off as they are placed in the trench.

Each plant, if broken off with a little earth clinging to it, is in condition to commence growing at once. The soil will hold the fibrous roots in a natural position and keep the plants in good condition, long enough to establish themselves in their new quarters.

When planting pot grown plants, the roots especially at the base of the ball must be loosened and the shoulder of earth at the top taken off, so the advantage of quick planting is in favor of plants grown in boxes.

Coarse seed, such as Hollyhocks, Hibiscus and strong growing plants are best sowed out in the open ground in spring or fall.

Sow in drills about one inch deep, the rows may be, from one foot, for *Papaver orientale*, to two and one-half for Hollyhocks as such plants grow very strong.

The seedlings must be thinned out where they are growing too thick; either transplant the surplus or pot them and grow in the cold frames.

These rows are far enough apart to work with the hoe or wheel hoe and the plants can be left growing until large enough for selling.

A cold frame makes an excellent seed bed, dig in well rotted manure; after pulverizing the top soil, work it level with the back of a rake and it is ready for sowing seed. The frame must be level and properly drained and with glass sash and shades, seed can be given the same care as in the greenhouse.

The seed may be sown broadcast or in drills about one inch apart, leave a space or lath between each kind of seed. Sow thin enough, so the seedlings can grow until large enough for potting into two inch pots.

Begin sowing seed in April; these plants will be ready for selling in the fall and the next spring. The seed frame can be kept busy the year round. As seed ripens on the plants, collect and allow it to dry for a couple weeks before sowing.

Seed is then in the best condition for germinating and the largest percentage of seedlings will mature if sown a couple of weeks after collecting. Seedlings grown outside, in the frame or seed bed are best potted until ready for planting out. The weather is less favorable for planting during the summer, than in spring and pot plants may be grown on in the cold frames until weather conditions are favorable for planting.

Seedlings potted in late summer and fall are best kept in the frames over the winter and planted out in early spring. Seedlings too small for potting in fall should be covered with straw or a like material that will not hold moisture and left in the seed bed, over winter, they make sturdy little plants for potting or planting out in spring.

Propagation by cuttings and division will be treated in a later issue.

A HANDY BULLETIN

Bulletin No. 7 of the Tennessee State Board of Entomology is a handy reference for nurserymen. It gives the Tennessee requirements in regard to the inspection and shipping of nursery stock in detail, also summary of the laws brought up to date of other states, Canada and Ontario.

SELLING METHODS

By STANLEY V. WILCOX

The selling problem is just as real to the nurseryman today as it is to the merchant in any other field. The time was, a few years back, that the market for nursery stock in many sections of this country, was greater than the supply. Now in some of these same sections any amount of stock can be grown and success is only with the firm that can best market it.

The nursery business has always been divided into two large classes. That class that specialized on the growing of stock and those, who by agents or catalogues saw to the selling and distributing. With the increasing competition, these two branches of the business must be knit more closely together and the grower no longer neglect the selling end.

Instances are numerous where large businesses have been built by strict adherence to specializing in the growing of fine specimen stock, and with little or no selling effort. In other words, relying on the excellence of the stock to do the selling.

Just as numerous instances of firms, whose selling methods have advanced and the stock end has not kept pace.

The ideal business is, of course, that in which we have a harmony of the two, high grade stock, and up-to-date selling methods.

No one hard and fast rule can be laid down in this or any other business that has so many branches and so many avenues through which stock is sold. The methods that would apply best to a strictly fruit business would fail most likely with the grower of ornamentals, and what might prove great business bringers to a wholesaler be a sad failure with the retailer. It is only very general methods, therefore, that are herein spoken of.

With a producing plant of any size today it is no longer possible to rely on the strictly local trade. The question of advertising comes up first, therefore, as the best known way of attracting the outside buyer.

The right kind of advertising should back up our every selling effort.

As nurserymen in general we have fallen behind many other less important industries through our neglect to advertise or to advertise properly. Not that we have spent less money, but that we have failed to study the question as it should be studied.

How many nurserymen employ an expert advertising manager? How many firms in other lines are without one?

Were I to criticize in a general way the nursery advertising of today, I should say that two-thirds of it is non-productive, because it entirely overlooks the fundamental principle of "The reason why?"

Backed up by carefully studied and well planned advertising there are many selling methods that may be adopted.

I think I am very safe in saying that taking the nursery business all through, there has been less attention paid to the building up of trained and efficient selling forces than in any business of like importance.

Have we one firm with as well trained and organized a selling force as that which markets the output of the smallest typewriter plant? Is there any good reason why this should be?

True, many nurserymen employ possibly hundreds of agents. There is a far cry, however, between the nursery agent that is, and the nursery salesman that should be. If it is not possible to have a selling force to represent in person we can have a selling force to sell by mail. A great field is opened up by the mail order business if we will only adopt up-to-date methods.

Do you answer your inquiries promptly?

Do you follow up your inquiries?

Are you as liberal and patient as you should be in giving out helpful information?

It would be impossible to estimate the amount of business lost every planting season through neglect of these important matters, and they are neglected, not that we don't want the business, but that we have failed to provide an organization to handle it.

Nothing will quite take the place of the catalogue as a selling feature for nurserymen and here at least is one field where our advance deserves commendation. It is a feature that is essential to every branch of the business and should continue in its present splendid way; make it interesting and attractive, illustrate with plenty of good photographs and describe stock truly.

When we consider the increasing demand for nursery stock of all kinds, due of course to the rapidly increasing population, the opening up of new territory and the awakening of a great interest in horticulture and arboriculture, there is no reason why the smallest nursery should not quickly grow to a large and prosperous business. It will only be, however, through strict study and application of modern selling methods as well as to our zeal in propagating and production.

AGRICULTURAL EDUCATION IN FRANCE

The investigation made by the Diplomatic Service in connection with President Taft's effort to introduce co-operative credit in the United States reveals splendid results from systematic organization of agricultural education in France.

"The value of the annual crops in France during the fifteen years that have elapsed since this educational system was introduced has increased by \$500,000,000. This remarkable result is entirely due to improved methods of cultivation resulting from the educational advantages now enjoyed."

It would be hard to compute the results of improved methods if they could be generally applied to the United States, even of the land now under cultivation. We must stand by our colleges and Agricultural Experimental Stations, and every effort that is made towards the broad-casting of knowledge of plant life.

ANNUAL ADDRESS OF PRESIDENT MAYHEW OF THE TEXAS NURSERYMEN'S ASSOCIATION

Ladies and Gentlemen:

At this, the twelfth annual meeting of Texas Nurserymen's Association, I hope you may every one receive inspiration, one from the other, that you will carry home with you and coin into golden eagles. One of the best results of our association meetings is touching elbows, one with the other, meeting in a social way our competitors, and studying each other from other angles than selfish business.

A GLANCE INTO OUR PAST

Twelve years ago certain progressive nurserymen organized this association, not because of selfish ends sought, but with a desire to further the interests of all through co-operation. It has been our custom, each year at least since, to meet together for counsel, for social benefits derived, and for business. I do not believe there exists a more unselfish organization of business men than those who form this association and, having been your president for three successive years, I believe I am in position to know whereof I speak. Covering this period, I cannot call to mind a single instance of petty jealousy or selfishness on the part of any member, which is a statement I rejoice to make. During the twelve years of your organization you have from time to time inaugurated policies in keeping with continually changing conditions, and I believe that from any point of view members of this association compare favorably with other business organizations of the country. Your efforts of the past have been to serve efficiently your patrons, and if you have a hope of the future that is above every other hope, it is that you may be able to produce better trees, trees that will produce better fruits, flowers that will bloom more profusely and of more becoming hues and tints, more pleasing to the senses, than has been possible in the past. I tell you, sirs, with no intent or desire to flatter, that the man who makes it possible for the poorest of his fellows to have the best in fruits and flowers at a nominal cost is not a bad citizen. There are men before me grown gray in the service of their fellows, and if just appreciation of all the blessings they have given humanity found expression in marble shaft, it would reach skyward.

PRICES—POLICIES

As I have just noted, you are giving to the world the best in your particular line that brain and brawn can produce, and you are giving this at a remarkably cheap price. The laborer is worthy of his hire, a fact the nurserymen are slow to learn. I believe, my friends, that we are doing ourselves a serious injustice, impairing our usefulness in a broad sense, in the foolish endeavor to market our product at prices that in the end mean loss rather than profit. This, very naturally, is a problem that must be solved severally, a condition that must be met individually, but it must be met. If stock is sold at a loss there is one thing certain—prices are too low or policies of making sales are wrong. We all realize that it is

possible to sell a product at its worth, or even above its worth, and lose money in the transaction, due to the exorbitant expense of marketing, which has been demonstrated during the past season in handling the fruit crop of Texas.

In this instance the producer gets less than the worth of his product and the consumer pays an exorbitant price comparable to the price received by the producer. Quoting from an article appearing in the press of the state some days since from the pen of a chairman of one of the sub-committees of Texas Welfare Commission, "Texas cantaloupes, which bring the farmer 37½ cents per crate and on which the freight from Texas to Denver common points is 28 cents, cost the consumer on the Denver market \$4.50 per crate." And again, "Texas peaches which brought the grower 60 cents per bushel cost the consumer at Denver common points \$3.75, and that these prices reflect their results upon Texas producers in that they lessen the consumption of the quantity." Not only in the above instance does the Texas producer receive less than the worth of his product, but, through manipulation of the middleman, his market is curtailed and, as a consequence, thousands of cars of fruit rot for want of a market. I believe, as has been suggested before, that a committee from the State Horticultural Society and a like committee from this association should work together to correct, if possible, this condition.

Furthermore, and as this question is related to our own marketing, are we not paying more in agents' commissions, freight and express charges, delivery expenses, etc., than is good for either ourselves or patrons? We are face to face with a condition here, as is true with all other lines of business, and this condition must be met and solved. Before the Texas Farmers' Congress in 1911, Col. B. F. Yoakum, in a paper regarding the high cost of marketing our products, gave these astounding figures: "Last year's agricultural products were worth \$9,000,000,000.00. Assuming that the farmer kept one-third for his own use, the consumer paid \$13,000,000,000.00 for what the producer received \$6,000,000,000.00." Col. Yoakum, in this splendid paper, estimated that by a proper system of marketing, the farmer ought to save at least \$2,000,000,000.00 of the \$7,000,000,000.00 which, under present system of handling, now goes to middlemen, the average worth per year's agricultural crop being used. Quoting further from his paper, "The \$2,000,000,000.00 we would save by a system of going more direct from the farm to the consumer nearly equals the factory values of all the steel, lumber, oil, sugar, and tobacco sold in the United States last year. It is more than the combined revenues of France, Italy and Germany. It is more than double the cost of running our government." My friends, listen! Somewhere between the prices paid by customer for trees and plants and the net price you receive for same, there is an expense account that must be reduced. It is costing too much to market our products and that concern that first solves this complex question will be the first

to reap the benefits. This is a matter, too, that must be solved individually. I have some opinions in regard to the question, but they run counter to established precedent and will not be accepted, at least for the present. Before leaving this question, let me say that a policy of making sales that was fairly satisfactory in 1890 or 1900 is no reason why it is safe and sane for 1912. We must study the question from present conditions and when this is done, the probabilities are that each of us will order radical changes in our methods of marketing. You have met and solved problems of policy in the past and I have confidence that in your own good way you will meet and solve this one.

PROGRAM—EXHIBITS—BUSINESS

Our meetings have from year to year suggested to your executive committee, whose duty it is to prepare your program, the advisability of not overcrowding. The best benefits derived from this meeting are not, perhaps, the speeches made, the papers read, but, instead, coming in personal touch, one with the other. We do not spend enough of life in a way calculated to develop the social man. The program for this occasion is brief and is made so that you may have time to get together for a visit socially or for business.

We should at each of our meetings make exhibits one of the strong features. In no other way can we more favorably advertise our products than by bringing samples of what we have to offer and by showing samples of fruits, especially new and rare varieties. Our exhibits each year are proving interesting and instructive and should be encouraged. One reason assigned several years ago for changing date of our annual meeting from July to September was that of business. At this date the buyer and seller could get together and the business results would be more satisfactory. This forecast has proven good, and each season proves conclusively the wisdom of the change. On more than one occasion I have suggested the advisability of dealing with one another, and I hope the day will come when this will be possible to a greater degree than now obtains.

CONCLUSION

Do we want to get a great deal out of this meeting, then let us put something into it. The man who puts large service in life gets most out of life. If we are niggardly toward the world, the world repays us niggardly. If any one of you have, since we last met, found a better way of doing things in our particular line of business, if there are certain problems that you have not been able to solve, if you have anything whatever of interest, it is your duty to take an active part in this meeting and tell the brethren what you know and what you do not know. The longer I live the more dependent I feel on the other fellow, the more I feel the need of his sympathy and his love, and the more I want to give of the little I possess. Someone has beautifully said, "I shall not pass this way but once; any good thing, therefore, that I can do, or any kindness that I can show to any human being, let me do it now. Let me not deter it nor neglect it, for I shall not pass this way again." In our battle for bread we often lose sight of the more important things of life. I

am persuaded to believe that that man or woman who accomplishes most in life is not he who gathers unto himself riches, honors, or glory, but rather he who gives freely in loving service. We live not unto ourselves. We are builders for the present, yes, but not for the present only. Others will come our way and, to a marked degree, will be influenced by our lives.

An old man going a lone highway,
Came at the evening, cold and gray,
To a chasm vast and deep and wide.
The old man crossed in the twilight dim,
The sullen stream had no fears for him;
But he turned, when safe on the other side,
And built a bridge to span the tide.

"Old man," said a fellow pilgrim near,
"You are wasting your strength in building here;
Your journey will end with the ending day,
You never again will pass this way;
You've crossed the chasm deep and wide,
Why build you this bridge at evening tide?"

The builder lifted his old gray head—
"Good friend, in the path I have come," he said,
"There followeth after me today
A youth whose feet must pass this way.
This chasm that has been as naught to me,
To the fair-haired youth may a pitfall be,
He, too, must cross in the twilight dim—
Good friend, I am building this bridge for him!"

The happiest man is the man who lives to give rather than get, who believes in the Fatherhood of God and the brotherhood of man, and so adjusts his affairs to life that whatever he does is in line with this high and noble privilege.

Waxahachie, Texas, Sept. 10, 1912.

NEW ASSOCIATIONS

During July a new nurserymen's organization was organized known as the Oregon-Washington Association of Nurserymen with C. H. Breithaupt of Richland, Wash., president; A. W. McDonald, Toppenish, Wash., vice-president, and C. A. Tonneson, Tacoma, secretary.

The Idaho State Association of Nurserymen was also organized with Mr. Hawkes, president; J. F. Littooy, Boise, Ida., secretary.

On the 18-23d of November, under the auspices of the Oregon State Horticultural Society will be held the Pacific Northwest Land Products Show at Portland, Oregon. In connection with this the annual meeting of the Society will be held, with which a fine program will be given, covering three days.

FEDERAL INSPECTION

Copies of the Rules and Regulations and other information, including application blanks, may be secured by applying to the Federal Horticultural Board, Department of Agriculture, Washington, D. C.

We would advise our readers to file their names and addresses with the Horticultural Board so their names may be placed on the mailing list of the Board, and all information, notices of hearings, changes in rules, etc., will be sent to them from time to time as issued.

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 M. Irvine, St. Joseph, Mo.
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STATE AND DISTRICT ASSOCIATIONS.

American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.;
 secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.
 American Retail Nurserymen's Protective Association—President, Charles J. Brown,
 Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in
 June.
 Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma;
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 secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.
 National Association of Retail Nurserymen—President, E. S. Osborne, Rochester,
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 Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-
 treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.
 Pennsylvania Nurserymen's Association—President, Samuel C. Moon, Pa.; secretary,
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 Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.;
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 Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas;
 secretary-treasurer, John S. Kerr, Sherman, Texas.
 Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.;
 secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second
 Wednesday in December.
 The California Association of Nurserymen—President, W. V. Eberly, Niles, Cal.;
 Secretary, H. W. Kruckeberg, Los Angeles, Cal.

FEDERAL
 INSPECTION
 BILL

Nurserymen are to be congratulated upon
 the outcome of the meeting between the
 Horticultural Board, the Legislative Com-
 mittee and the Committee of the New York
 Importers' Association which was held at
 Washington on September 16th and 17th and reported in
 our last issue.

The hearty thanks of the Importers and Nursery trade
 at large is due to the committeemen who gave their time
 and services to attend the hearing, also to the Horticultural
 Board whose considerate attitude made possible the changes
 from the Rules and Regulations governing the Federal Im-
 port Bill as outlined.

As at first outlined there were several clauses in it that
 would have worked a hardship on the nursery business with-
 out accomplishing the aims of the government. It speaks
 well for the Department of Agriculture, and shows that they
 have the welfare of the nurserymen at heart when the Horti-
 cultural Board so willingly met the Legislative Committee
 and consulted with them, concerning the Rules and Regula-
 tions before putting them into effect.

The result is a more practicable law and greatly increased
 confidence between the Department of Agriculture and the
 nurserymen at large. This is as it should be; they are both
 working for the same end, and the closer they get together in
 mutual confidence the better it will be for Horticulture and
 the country at large.

One very important influence upon plant
 growing is very largely overlooked by
 SHELTER FOR PLANTS nurserymen in this country. Every practi-
 cal man who has worked among plants for

any length of time knows how important shelter is for many
 of the choicer sorts. With many things it is really the
 difference between success and failure. The Dutchmen know
 the benefit derived from wind-breaks and have their nurseries
 well protected in this respect by planting hedges at intervals.
 The hedges in question are formed of all kinds of plants, such
 as Beech, Alder, Maple, Arbor Vitae, Hawthorn, English
 Oak, etc., in fact anything in the shrub or tree line that can
 be made to grow uniform and kept within bounds. These
 windbreaks very generally used in the Boskoop District,
 where the evergreens are grown, also in the bulb district of
 Haarlem and vicinity. Their value is unquestioned.

American nurseries would be able to carry a much choicer
 line of stock if more attention were given to this phase of plant
 growing.

Some nurseries are happily situated and have all kinds of
 exposures enabling the grower to choose according to the
 wants of the plant, while in others all protection must be
 artificially produced.

It is the "wants of the plant" that should really dominate
 all planting. If this was the general practice by Landscape
 Gardeners we should have very different places and Land-
 scape Gardening would take a tremendous step forward, but
 that would require men as thoroughly versed in horticulture
 as in design.

RATIONAL TREATMENT OF EVER- GREENS

It is not an uncommon thing to see even in nurseries evergreens, such as the *Retinisporas* and *Thuyas*, receive an annual clipping with a pair of shears, much in the same way a hedge is clipped or the grotesque forms seen in a topiary garden.

If you ask the nurseryman why he does it, he will very likely say "to make them bushy." It is possible this object was what started the practice, but that it is carried on without rhyme or reason is also true.

Speaking generally, the average retail buyer depends entirely upon the nurseryman for his selection of plants. If the nurseryman sells him sheared evergreens, he will plant sheared evergreens and keep on shearing the poor things, until they are nothing but stubbed monstrosities.

The nurseryman deals entirely with nature and while fashion may occasionally demand abnormally straight trees in crooked growing varieties, dictators of fashion know so little about plants that the nurseryman is practically his own master yet in spite of this there is a tendency to fall into a rut or custom, that is neither founded on beauty or common sense.

If the nurseryman loves his plants and thinks for himself, he will not need to ask what is the right thing to do. As an illustration, take two rows of *Retinispora plumosa aurea* or evergreen of similar habit, starting with them when they are young and unformed, the one row subject to the shearing process and the other treat in a natural way, that is, select a leader and neatly stake it up, and only prune with a knife, cutting those few twigs or branches necessary to bring it into good natural shape and prevent double leaders, in fact just train the young plant so it will develop in a natural manner and lay the foundation for a noble plant.

In the sheared row he will have bushy plants, that will become so thick that the interiors will soon be full of dead foliage, a grand harbor for red spider, thrip and other pests and plants with vitality lowered that they seldom make good specimens and usually succumb to the slightest adverse condition.

The properly grown row will be much larger, looser, more graceful, natural and twice the vigor, and if properly grown will be quite bushy enough for health and to suit the most fastidious purchaser.

The Pines, Spruce and Fir object so emphatically to the shears they are usually let entirely alone, much to their advantage.

The hemlock is as often spoiled as not but perhaps not quite so often as the *Retinisporas*. Some of the *Thuyas* grow so compactly that even the man with the shears passes them by.

The real facts are, that it is only in very exceptional instances when the shears may be used to an advantage.

Evergreens well grown are much more beautiful in their own natural habit and will bring the nurseryman better returns than maltreated ones. The knife is the proper correction of faults not the shears.

Some few evergreens such as Box and Yew may be sheared with impunity, without seriously affecting the health of the plant, and may be used to satisfy the taste for artificial outline in plants; but as a rule all shearing should be the exception and not the rule.

The rule on every nursery should be to let nature be the teacher. The nurseryman merely helping nature to do her best.

It would be amusing if it were not pitiful to note how stereotyped are becoming the shapes of the many kinds of evergreens imported from Holland. The custom of grading by height alone has induced the Dutchmen to stake up and grow to a leader such prostrate and semi-prostrate growing kinds as *Juniperus Tamaricifolia* and *Juniperus Japonica aurea*.

PROMOTING EFFICIENCY AND LOYALTY AMONG EMPLOYEES

It is gratifying to note the efforts of the Oregon Nursery Company in behalf of its employees, as outlined by the assistant secretary and treasurer, Mr. R. E. Parsons, in the September NATIONAL NURSERYMAN. The plan while good, is by no means ideal because not all are so situated as to be able to save enough to purchase a profit sharing certificate. Here is where the plan fails; the hard-working efficient employe who has others depending on him and who cannot save to buy a certificate, is not at all benefitted, while he is probably the most desirable to be helped. On the other hand, a single man with no dependants and only a fair employe, who can save probably half his wages, derives much benefit by being able to purchase these certificates. In one case the one who has always been loyal and efficient and no doubt cannot afford to be otherwise, and whose loyalty and efficiency is well worth attesting, gets nothing; while the other gets all that he is able to buy. It would seem that such a plan would encourage some but it would discourage others.

If it were desired to promote efficiency and loyalty among all the employees why not issue profit sharing certificates of no face value in various sums, bearing a certain rate of interest based on the past year's business; the smaller amounts to the least efficient and working up in increased amounts to the most efficient, regardless of earning or saving ability. To promote still greater efficiency a proviso might be added that if through the carefulness, loyalty and efficiency of the employees an increased profit was earned by the company, an increase in the rate of interest would be made. This gives each one a chance to make something extra and the employer can reward the efficient employe, without making him in turn loan the company money to get the reward.

Efficiency is brought about largely by the interest of the employer in the employe and not by putting the employe in a position where he can for cash buy his employer's reward.

It is the thoughtfulness of the employer for the employe that counts; the surrounding him with good materials, good tools and a good place to work; teaching him modern methods, fostering new and individual ideas, and in every way helping each one to do a bigger and a better day's work, thus enabling him to earn more. This tends to the promotion of loyalty and efficiency even more than money. The combination of the profit sharing certificate and the personal interest of the employer in each individual employe will go farther toward promoting maximum loyalty and efficiency than any other workable scheme. GEORGE W. OTTINGER.

Obituary

BENJAMIN CHASE

Benjamin Chase died at his home in Derry Village, September 27th, following a period of illness dating back nearly a year. He had been able to be about his home and even to walk in the village until within the past month. His wife died Jan. 7 last and since that time he had not enjoyed good health. Mr. Chase was one of the most highly respected men of the town.

He was born in Auburn, Aug. 18, 1832. He grew to manhood on the paternal estate in Auburn attending the district school in his boyhood and youth. Subsequently he attended for several winter terms a select school at Lee, where he profited by the instruction of that magnetic and progressive educator, the late Moses A. Cartland. With only brief interruptions he aided his father in the work upon the home farm and in the millwright for agricultural pursuits, he was encouraged by his father in a free use of the mechanical tools in the home work-shop, and developed much skill in that line, so that at the early age of 15 he began to engage in mechanical work by the day. At the termination of his period of schooling he gratified the craving to go to sea that is felt by many a country lad, and made a voyage before the mast from Boston to Mobile, Ala., and thence to Liverpool, England, which experience was a very practical and beneficial graduation into life's higher school. On his return he continued further mechanical service in conjunction with his father until 1855, after which he was employed as a millwright in various textile manufactories in New Hampshire and Massachusetts until 1867, when he laid the foundation of a manufacturing business in Derry.

He established the plant-stake and reed factory here and for many years did a successful business, conducting all its interests unaided. The original mill stood on the site of the present structure. It was burned in 1883. He rebuilt and fire again destroyed the entire set of buildings Dec. 8, 1910.

Mr. Chase was of a very ingenious nature and to him is due the credit of originating and inventing the intricate

machinery that is now used in the company's plant. He made no pretensions to being an inventor, yet his skill in the line of originating and perfecting the machinery that he needed in his own mill was remarkable. He was the first to make the printed wired label in 1883.

On June 17, 1875, Mr. Chase married Harriett D. Fuller of Dunbarton. An only child, Mrs. Charles E. Newell, and three grandsons survive.

IMPORTERS' NOTES

Most of the requirements of the new "Plant Quarantine Act" which went into effect Oct. 1st, fall on the New York

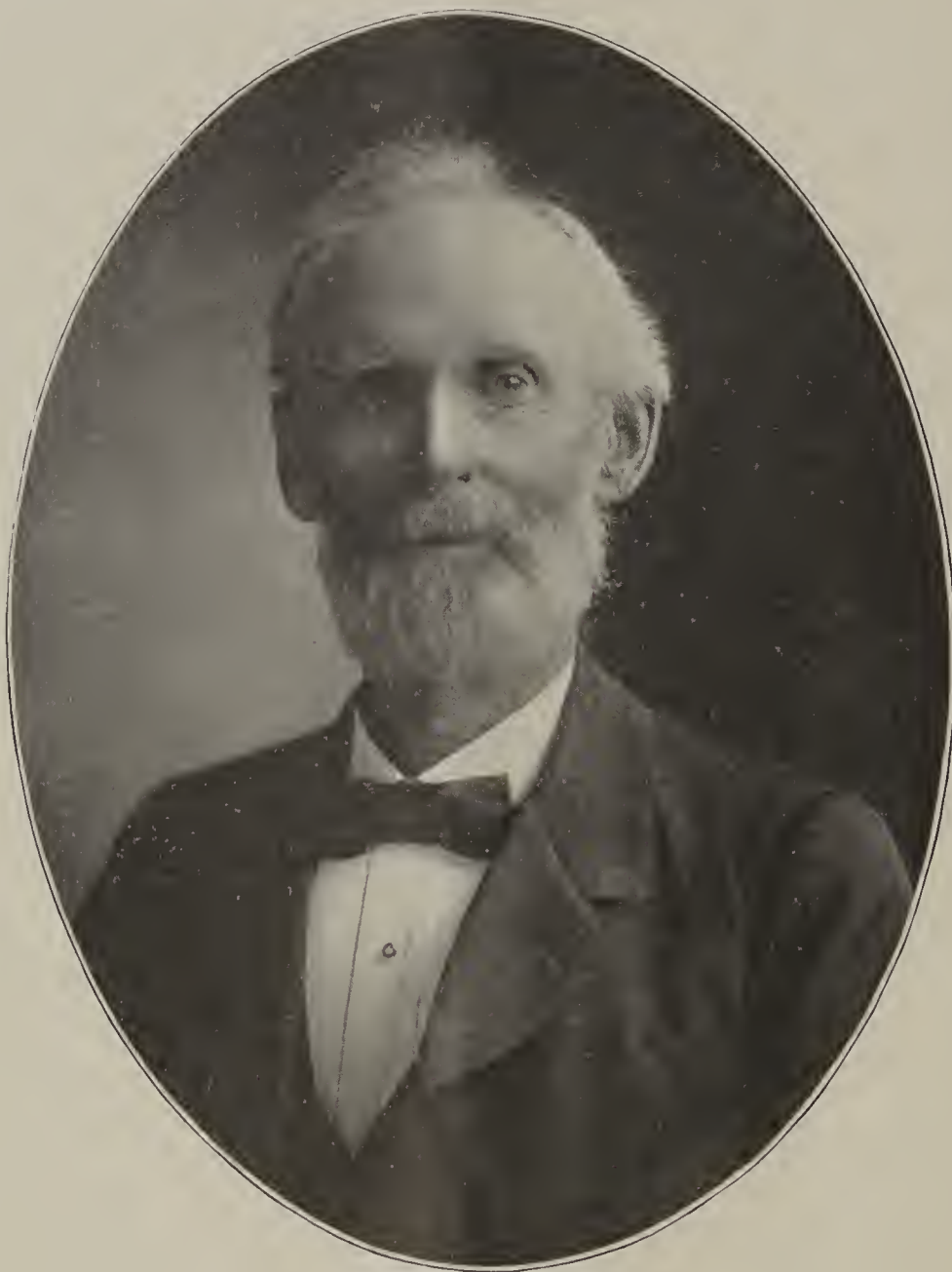
Import Houses who have been too busy the last month procuring permits, instructing their foreign houses how to comply with the new Rules and Regulations and other matters relating to the new law to attend to regular business.

French Fruit Stocks have had a good clean up this season. Apples and Mahalebs being the only stocks still available in any quantity. Ornamental Stock is in large demand.

In Holland stock there is as usual an almost inexhaustible supply. Roses are cheaper, except Baby Ramblers; Rhododendrons and Boxwood are plentiful, Norway Maples are especially fine this season.

All European stock will be better than the average this season, prices are a little higher than last season on the average and the total value of imports will be up to the high water mark of last year.

Yours truly,
McHUTCHISON & Co.



BENJAMIN CHASE.

STRANGE BLIGHT KILLS TREES

Hundreds of magnificent sugar maples at Palmyra, N. J., have died during the last two years from a disease that tree experts of the State have been unable to explain or cure. T. Winfield Land, member of the Shade Tree Commission, expresses the opinion, following his investigation of the tree malady, that the maples are affected with a trouble that is a sort of first cousin to the chestnut blight, which is destroying the chestnut groves of the State.

Only the sugar maples seem affected by the disease, and the commission has recommended that Norway maples be substituted where the dying trees have been removed.—*Public Ledger*.

Answers to Correspondents

We are thinking of buying considerable stock from Nurseries in France for lining out:

After stock arrives in New York how can we arrange to pay duty, etc.

Please give in detail necessary information: What is the duty on Barberry Seedlings and other small plants, roses, etc.?

About what would be the transportation charges on approximately 5,000 pounds?

K. C. N. Co.

The duty differs according to the kind of nursery stock; on ornamental trees and shrub seedlings it is 25% *ad valorem* but on budded roses there is a specific duty of four cents each.

We are unable to say what the transportation charges would be on 5,000 pounds, as the rate differs according to the steamship and is fixed according to bulk or cubic measure, rather than weight. We rather think the simplest way for you to import would be through one of the New York Importers who would look after the consignment on arrival, advance the duty and ship it on to you. You will find some reliable houses advertising in the NATIONAL NURSERYMAN.

What are the special requirements to grow Rhododendrons and what is the difference between the native American Rhododendrons and the imported ones?

M. C. H.

Rhododendrons are not very adaptable plants, if an account were kept of the successes and failures, the latter would be greatly in excess, at the same time it is the opinion of all who see a lot of healthy plants in flower they are worth striving for.

The one serious obstacle to growing these beautiful plants that cannot well be overcome by artificial means is the presence of lime or alkali in soil or water. If these are present, effort will be sure to end in failure or only very moderate success.

The soil that suits them best is a peaty one, although good fibrous loam with a liberal quantity of sand and cow manure makes a good compost for them.

The essentials are well drained position, yet where it is constantly moist, protection from bleak cutting winds in winter and hot dry ones in summer.

They are not a deep rooting plant, but very fibrous and near the surface, so that cultivation should be avoided. In its place a mulch of decaying leaves or other light material will serve to prevent the weeds growing and conserve moisture.

The native American Rhododendrons are *R. maximum* and grows wild through the Alleghanies from New York to Georgia and is even found as far north as Maine and as far west as Ohio in favored locations. It blooms in July and is pale rose color or nearly white.

R. Catawbiense is a Southern species growing in the Alleghanies from Virginia to Georgia, it flowers a little earlier, does not grow quite so large and the flowers may be described as a lilac purple.

The imported ones are garden varieties or hybrids of *R. ponticum*. They have a great range of color, bloom early in the spring.

Some varieties are much hardier than others and on this account better adapted for planting out of doors, while others are only suitable for greenhouse culture.

There is undoubtedly a future for some enterprising young nurseryman who would make a study of these plants and a success in growing them and their allies as the demand is unlimited.

THE TEXAS NURSERYMEN'S ASSOCIATION

The Texas Nurserymen's Association held its twelfth annual session at Marlin, Texas, on September 10th and 11th. The attendance was not large, yet the Convention proved a very interesting and profitable one.

The annual address of President J. R. Mayhew was a splendid plea for harmony and brotherly love in the Association, as well as for high class production and lofty aspirations among the members. The addresses all were timely and full of inspiration.

A general feeling of hopefulness and satisfaction as to present conditions and prospects of the fall trade activities prevailed. There is reported a good general stock on hand and the improved conditions throughout the country are having a stimulating effect on trade conditions.

A motion prevailed to ask the next legislature to revise the Nursery and Orchard Inspection Law, so as to eliminate the clause requiring the State Inspection of shade trees transplanted from the forests.

An entirely new set of officers were elected as follows: O. K. Phillips, Rockdale, president; M. G. Black, Mt. Pleasant, vice-president; J. M. Ramsey, Austin, secretary and treasurer.

The citizens of Marlin were thanked by the Association for many courtesies extended, also the retiring officers for efficient services.

JNO. S. KERR.

"THE NEW EDITOR"

The Editor sits in his sanctum
With dozens of letters to scan
Hush; don't you know he is editing
The NATIONAL NURSERYMAN?
And Willie his private Sec. is there
And Bill, the office boy too,
While the world outside in wonder waits
To see what they can do.

With sleeves rolled up and spectacles on
And everything looking "bum"
While cigar smoke rolls around in clouds
They are going to make things "hum."
The click, click, click of the Remington's heard
The Editor speaking low
While Willie, the secretary, is up to the neck,
The office boy thinks it slow.

The Editor's wife she dreams by night
Of letters and papers and dust
And in the day-time looks askance
At waste baskets ready to bust.
His youngsters wonder what's gone wrong
And what's the matter with Pop
He never plays at "chu-chu" now
Never has time to stop.

The Editor's sister goes inside
To have a look at the den
But he fixes her with his eagle eye
And chases her out again.
Good luck to the NATIONAL NURSERYMAN,
The Editor, Sec. and Boy,
Good luck to his wife and youngsters too
We wish the whole crowd joy.

M. H.

NO QUARANTINE ON NEW ENGLAND NURSERY STOCK

Report of the Hearing Before the Federal Board of Horticulture at Washington, D. C., October 30th

New England nurserymen have been greatly exercised by the announcement by the Federal Horticultural Board of a proposed quarantine of the greater part of New England on account of the ravages of the Gypsy and Brown Tail Moths.

The hearing, which took place Wednesday morning, Oct. 30th, in the Agricultural Department at Washington, brought together a large delegation of interested nurserymen, all anxious to protest against any drastic quarantine action against the New England nurseries.

Among those present were K. L. M. J. Farquhar of Boston, who held a special appointment from Gov. Foss of Boston to attend the hearing. W. H. Wyman, president of the New England Nurserymen's Association, Thomas B. Meehan, president of the American Association of Nurserymen, James McHutchison, of the New York Importers' Association, and a number of others prominent in the nursery business of New England. Likewise Geo. B. Atwood, State Nursery Inspector of New York, Wm. J. Stewart, editor of *Horticulture*, Boston and numerous State Inspectors and Entomologists from the area, which it was proposed to quarantine.

The situation was relieved at the outset by the announcement by Chairman Marlatt, of the Board, that the proposed quarantine would not materially affect the nursery industry but was aimed to regulate or prevent the movement of Christmas trees, lumber, and railroad ties from within the quarantined district to other sections of the United States.

The inspection and certification of all nursery stock in the quarantine district it is proposed to still leave in the hands of the State authorities, which State inspection the Board feels is already as thorough and efficient as it possibly can be made, and at most the Federal Board would no more than aid and co-operate with the State authorities.

Mr. Farquhar opened the remarks on behalf of the nurserymen. He stated that he had come to Washington believing that drastic steps were to be taken against the New England nurserymen but after talking with the several members of the Board he felt there was no cause for alarm as he realized that the Board does not intend to enforce any measures that would interfere with the movement of nursery stock from New England, where the present State laws were properly enforced. He felt that the Board would only require that the nurseries be kept clean as they now are.

Mr. Farquhar approved of the proposed quarantine on Christmas trees and greens, believing that the distribution of the moths could be more largely attributed to this cause than through nursery stock.

Prof. Rogers of the Entomological Department of Washington who has had an active interest in the work of the Department in the affected areas in New England, spoke of finding Gypsy Moth and Brown Tail Moth in large quantities in shipments of Christmas trees and Christmas greens which

were shipped to Brooklyn, New York. As many as five hundred clusters of the egg being found on four car loads of Christmas trees.

Alfred E. Brigg, representing the Boston Fruit and Produce Exchange spoke against the quarantine on Christmas trees.

Mr. Wyman, president of the New England Nurserymen's Association, said he was greatly relieved by the statement of Chairman Marlatt, that the quarantine would not affect the nursery industry. Had he been assured of this fact before leaving Boston he would probably not have attended the hearing for now he was sure that the interests of the New England Nurserymen could safely be left in the hands of the Board.

In Massachusetts, he said, they had a very effective inspection not only of the nurseries but also covering an area of three hundred feet surrounding the nursery grounds. They depended not only upon State examination but also carried on a very thorough inspection with their own men both in the field and again in the packing houses before shipping the nursery stock and since putting this thorough inspection into force they have never had a single complaint from any point. All New England nurserymen are in sympathy with the work of the Board and have no feeling that the Board will do anything against the interests of the nurserymen.

He wished to convey to the Board that the nursery business is but a very small means of transporting the moth, but that it is carried by artificial means, such as automobiles, and railroad trains. With the very efficient inspection now in force there is no danger of its being carried on nursery stock. "Let well enough alone," said Mr. Wyman, "and give Federal authority to continue present method of inspection."

The issuing of a notice of quarantine against New England has been a great scare and has already caused the loss of thousands of dollars in orders for nursery stock. He trusted that Dr. Howard and the members of the Federal Board would do all possible to let the public understand that the proposed quarantine in no wise affected the nursery business but was intended to prevent the distribution of the moth by means of Christmas trees, railroad ties and lumber. The nurserymen of New England have already felt the injury caused by the issuing of the notice of the proposed quarantine.

Dr. Brittan, State Entomologist of Connecticut, spoke of conditions in his state and said that the moth had already been wiped out in sections where heretofore it had been more or less prevalent and by a chart showed the decrease from year to year since the department had been engaged in active warfare against the Gypsy and Brown Tail Moths. The work of extermination being well organized, it would be unnecessary to place a quarantine on such sections in Con-

necticut where heretofore the moths had been largely found.

Mr. Barnes, a nurseryman of Yalesville, Connecticut, stated that he had great confidence in the ability of Dr. Brittan to take care of the situation in Connecticut and would be greatly pleased if the Federal Board would see fit to leave the matter in the hands of the State authorities.

Dr. Marlatt here explained that the law does not require the Federal Government to make any inspection but simply provides for the making of rules and regulations governing quarantine, but that in Massachusetts there is a special law allowing the co-operation of the Federal Government and Massachusetts nurserymen could rest assured that the Board would not "butt in" where efficient inspection was already being carried on. The Board could make rules and regulations under which stock could be moved but the carrying out of these provisions must be done by the State authorities.

Through his attorney, Mr. Borst of the "Little Tree Farms" explained the work of reforestation for private enterprises which his firm was carrying out and urged that no steps be taken by the government to interfere with this work.

Further remarks were made by Dr. Fernald of Massachusetts, Geo. G. Atwood, New York State Nursery Inspector and others.

The Board announced that their decisions would be given out in a few days and the hearing was then closed.

NATIONAL NURSERYMAN,

Rochester, N. Y.

Gentlemen:

Recently the Massachusetts Nurserymen's Association appointed a committee of three, composed of Messrs. Henry S. Dawson, manager of the Eastern Nurseries, Jamaica Plain, Mass.; Charles H. Fish of the West End Nurseries, Worcester, Mass., and the writer, to call the attention of the various Senators and Representatives to the unwarranted interference with our business proposed by the "Federal Horticultural Board."

We beg leave to enclose herewith a copy of a letter which the committee addressed to the various Representatives and Senators, and an editorial from "Horticulture," which is self explanatory.

We ask if you will lend the force of your paper towards assisting us along the lines on which we are working.

Any editorials which you may see fit to publish will, I am sure, be appreciated by the entire Nurserymen's Association of New England.

Yours very truly,

AMERICAN FORESTRY COMPANY,
Per Theodore F. Borst.

BOSTON, Mass., October 19, 1912.

HON. HENRY CABOT LODGE,

Nahant, Mass.

Dear Sir:

Under the authority of the Federal "Plant Inspection Law" enacted August 21st, 1912, the "Federal Horticultural Board" of the U. S. Department of Agriculture proposes to

establish a quarantine against the Gypsy and Brown Tail moths in the New England States, Massachusetts included, and for that purpose, as required by law, has appointed October 30th for a public hearing in Washington on this proposal.

This proposal is of vital importance to the extensive nursery interests of Massachusetts in which more than \$3,000,000 are invested, and may well mean a disastrous and wholly unreasonable interference with, or destruction of, the business. Massachusetts has a splendid system of nursery inspections, (in charge) of most competent officials and costing the state \$15,000 per annum) not only of growing stock but also of goods at time of shipment. Further safeguards are provided by protected zones around the nurseries. Data shows shipments from Massachusetts nurseries very nearly if not entirely, free from these moths. And nurserymen are, to a man, cooperating with the state officers in this work.

On the other hand, the spread of these pests is almost entirely due to other causes, for example, freight cars, automobiles, winds, etc.

Consequently, Massachusetts nurserymen are unwilling to have the Federal Horticultural Board adopt any regulations which will prohibit or unfairly regulate our interstate business, which will provide unreasonable inspections, or which may kill our business by advertising us as a pest infested state. We especially urge that no regulations affecting our business be acted upon without giving us at least thirty days notice of the specific regulations proposed, thereby affording us a reasonable opportunity to show the conditions and the effect of the proposed regulations on our trade.

The Massachusetts Nurserymen's Associations, comprising most of the nurserymen of this State, has appointed and authorized the undersigned committee to appeal to you for your active interest and support in urging the Horticultural Board to consider and rule in accordance with actual conditions in Massachusetts. We strongly feel that your help will be of great benefit to our cause, and it certainly will be highly appreciated by Massachusetts Nurserymen.

Yours very respectfully,

THEODORE F. BORST,
15 Beacon St., Boston, Mass.

HENRY S. DAWSON,
CHARLES R. FISH.

AN UNFAIR AND FUTILE PROPOSITION

[Editorial from *Horticulture*, Boston, October 19, 1912]

A few weeks ago, under the heading of "Frenzied Quarantine," we took occasion to comment upon the hysterical hue and cry for government inspection and quarantine against material liable to carry plant diseases and insect infestation which has now come to be almost a daily incident from one direction or another. Among the latest are the issuance of a California state edict against all vegetables, nursery stock, etc., from the whole tier of Southern States; a campaign to secure expert examination of all mail matter entering California under the parcels post law; and, now, a hearing before the Horticultural Board at Washington on October 30 to decide whether the nursery stock and other horticultural

products of New England shall be shut off from shipment into other states on account of the possibility of carrying the gypsy and browntail moths to new localities. Admitted the necessity of protecting crops from the depredations of insect and fungous pests and agreeing that all practicable means must be taken to prevent the spread of these scourges to other sections, the question arises as to whether a quarantine such as is now proposed would have any effect of sufficient weight to justify the deliberate crippling of a long established, reputable and useful industry such as the nursery trade of the New England States. As to the brown-tail moth, a watch for their web-nests on tree shipments would accomplish all that it is possible to accomplish by inspection. The prohibition of shipments from infested territory would bear hard on the nursery trade but would not exclude the brown-tail, for the method of distribution of this moth is by flight in mid-summer and thus a law against wind and water would be just as sensible and just as effectual as a quarantine against the brown-tail, as everyone familiar with the life history and habits of the insect well understands. So far as the gypsy moth is concerned inspection of nursery stock shipments will accomplish practically nothing, but a permit based upon an intelligent summer inspection of the nurseries would mean something and should be insisted upon without qualification. Unlike the brown-tail, the female gypsy moth cannot fly, and consequently is itself incapable of extending its field of depredation except by very slow and very evident stages. The mediums by which the gypsy is carried from one place to another are, in the caterpillar stage, largely carriages, autos and railroad cars; also in the egg period, by railroad ties or other timber, rails, granite or similarly exposed material. A freight car left on a siding in an infested region for a few days in the egg-laying season in July can transport the pest across the continent, with detection practically impossible. Nursery-grown products are, indeed, infinitesimal in their liability to disseminate the pests for, in self-protection, nursery stock is necessarily kept clean, and it is as wasteful and ill-advised as it is fruitless, wrong in principle and ethics as it appears to be in motive, to oppress, as is contemplated, an industry and a section already hard pressed and overburdened with the expenditure of many millions of dollars in the cause, because of ignorance of the situation or to gratify the rapacity of interests that might, through this proposed restriction, reap a selfish commercial advantage.

MATURED SPECIMEN PLANTS

When the nurseryman is writing a catalogue or perhaps trying to tell a customer what a tree or shrub is like at maturity, he will often realize that he does not really know or perhaps has never seen one. He may be able to recognize the plant from a twig or even a piece of the root from a small nursery grown plant but not really recognize a well grown matured specimen.

Many of the older nurseries have fine specimens growing on their grounds to which they point with pride. Planted by the founders who loved their plants, as well as grew them for a livelihood. It is a good practice to plant a good thing on the nursery and let it remain wherever and whenever an opportunity occurs. They will earn their keep through their

seed, scions, photographs or advertising to visitors. It is, however, impossible for a nursery to have a matured specimen of all the plants they grow, but the nurseryman should never lose opportunity to visit and make the acquaintance of matured specimens. What nurseryman does not get inspiration from a visit to a good private place or a public park like the Arnold Arboretum or the Shaw Gardens. He comes away acknowledging to himself that such and such a plant is really a good thing and ought to be grown more and pushed, and then again he sees plants as they are in full developed beauty and mentally decides that all the shearing and pruning certain plants need is just enough to get them started right in the way they should grow.

When it comes to describing the possibilities of that particular plant to his next customer, there is more truth and enthusiasm in his statements and sales are more likely.

The country needs more such objective schools, our parks and gardens are good, but will not reach their maximum until the tree or plant is king and all other affairs of the park or garden, whether they be political, design of the landscape gardener, or miss-use of plants by the management are subordinate to them.

In such institutions as Kew Gardens, London, and the Arnold Arboretum, Boston, one may see the plants reigning supreme and the entire management studying their wants and these gardens are famous.

THE NURSERYMAN'S WIFE HEARD FROM

Who is it in the gladsome Spring
When all the birds are gay
Is hard at work at 5:00 A. M.
And all the live long day
The nurseryman.

Who is it in the summer-time
When wife suggests "vacation"
Says "No, dear, I must be taking stock"
And fills her with vexation.
The nurseryman.

Who is it in the Autumn time
When leaves are turning brown
Is still at work on catalogue
And cannot leave the town.
The nurseryman.

Who is it in the winter-time
When wife's all tired out
Says "Think I'll take a business trip
Hunt trade up in the South."
The nurseryman.

Then comes a wife's chance. Did you ever take a business trip with Hubby? If not try it, but in this wise. First assure him that it doesn't mean several saratoga trunks to look after besides hand luggage. A suit case will be plenty, you are not in the same place long, so one light dress will do for any special occasion. A coat suit and shirt waist with a couple of fancy waists with the necessary comb, brush, etc., a couple of good books or a bag of embroidery. If you like, in case you get tired as hubby tramps over a nursery or estate, you can find one of the many beautiful spots which always abounds in places where the nurseryman goes and rest till he is through.

All work is not good for him on such trips and he will I am sure act upon and appreciate a suggestion of a trip to the theatre, or some such diversion and you will soon find the "business trip" may combine business and pleasure and so be a vacation too.

E. R. M.

UNITED STATES DEPARTMENT OF AGRICULTURE,
Office of the Secretary, WASHINGTON, D. C.

October 9, 1912.

NOTICE OF PUBLIC HEARINGS ON GYPSY MOTH AND BROWN TAIL MOTH

By Section 8 of the Plant Quarantine Act, approved August 20, 1912, the Secretary of Agriculture is authorized and directed to quarantine any State, Territory, or District of the United States, or any portion thereof, when he shall determine the fact that a dangerous plant disease or insect infestation, new to or not theretofore widely prevalent or distributed within and throughout the United States, exists in such State or Territory or District.

Before establishing such quarantine the Secretary is directed to give a public hearing, at which hearing any interested party may be present and be heard, either in person or by attorney.

The Gypsy Moth is one of the most destructive insects which attacks fruit, shade and forest trees. It is known to occur in limited areas in Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut and as the egg masses of the insect may be transported on Christmas trees and greens, living trees and shrubs, or on forest products, such as cord wood, lumber, telephone poles, railroad ties, etc., it is necessary that every possible means be taken to prevent distribution to other sections of the United States.

In order to accomplish this purpose it is proposed to establish a quarantine covering the District now known to be infested with this insect in order to regulate shipment from such district of plants or plant material which may carry the pest. If the proposed quarantine is established, the Secretary of Agriculture will issue regulations providing for the inspection of material to be shipped out of the quarantined area which is liable to transport this insect. The shipment of Christmas trees and Christmas greens out of the quarantined area will in all probability be prohibited, except in so far as it may be possible to inspect them.

Notice is hereby given that in compliance with the law a public hearing will be held at the Department of Agriculture, Washington, D. C., on October 30, 1912, at ten o'clock, in order that all parties interested may appear or be represented, to give testimony concerning the advisability of placing a quarantine on certain portions of New England to prevent the spread of the Gypsy Moth.

If the proposed quarantine is established it will probably cover the following territory:

Maine: All towns bounded on the south by the Atlantic Ocean, as far east and including as a boundary the following towns on the east and north, Georgetown, Westport, Edgecomb, Damariscotta, Nobleborough, Newcastle, Alna, Whitefield, Chelsea, Pittston, Dresden, Richmond, Bowdoin, Webster, Lewiston, Auburn, Poland, Casco, Raymond, Windham, Standish, Limington, Cornish, Porter and the New Hampshire line on the west.

New Hampshire: All territory in New Hampshire bounded by the Atlantic Ocean and the Maine line on the east; by the towns of Freedom, Ossipee, Tuftonborough, Meredith, New Hampton, Hill, Danbury, Wilmot, Salisbury, Warner, Henneker, Hillsborough, Antrim, Hancock, Dublin, Troy, Richmond and Winchester on the north and west and by the Massachusetts line on the south.

Massachusetts: All territory bounded by the New Hampshire line on the north; by the towns of Warwick, Orange, Athol, Petersham, Barre, Oakham, Spencer, Sturbridge, Charlton and Dudley on the west; Webster, The Rhode Island line and the towns of Swansea, Rehoboth, Taunton, Berkley, Lakeville, Rochester, Acushnet, New Bedford, Marion, and the Atlantic Ocean on the east; and also the towns of Lenox, Stockbridge and Great Barrington in western Massachusetts.

Rhode Island: The following towns in Rhode Island: Burrillville, Glocester, Woonsocket, Smithfield, Cumberland, Lincoln, Pawtucket, North Providence, East Providence, Johnston, Cranston, Warwick, Barrington, Warren, North Kingston, Portsmouth and Bristol.

Connecticut: Stonington and Wallingford.

Immediately after the above hearing another hearing will be held with regard to placing a similar quarantine on certain portions of New England which are infested with the Brown Tail Moth, an insect which

is causing serious damage to fruit and deciduous trees as well as some species of ornamental and shade trees, such as oak, elm, etc. If it is determined to establish a quarantine against the Brown Tail Moth the following territory will probably be included:

Maine: All towns south and including the towns mentioned, Robinston, Charlotte, Cooper, Plantation XIX, Wesley, Plantation XXXI, Plantation XXX, Devereaux, Plantations XXVIII, XXXIII and XXXII, Milford, Alton, Bradford, Atkinson, Dover, Sangerville, Parkman, Wellington, Brighton, Solon, Embden, Anson, New Vineyard, Temple, Wilton, Carthage, Mexico, Rumford, Newry, Riley.

New Hampshire: All territory south of Shelburne, Gorham, Randolph, Jefferson, Whitefield, Dalton on the north, the Connecticut River on the west and the Massachusetts line on the south.

Vermont: Towns of Ryegate, Newbury, Bradford, Fairlee, Thetford, Norwich, Hartford, Hartland, Windsor, Weathersfield, Springfield, Rockingham, Westminster, Putney, Dummerston, Brattleboro, Guilford, and Vernon.

Massachusetts: All towns east and including Leyden, Greenfield, Deerfield, Whateley, Hatfield, North Hampton, East Hampton, Holyoke, West Springfield, Springfield and Long Meadow, also North Adams and Clarksburg.

Rhode Island: All towns in the State except Exeter, Hopkinton, Richmond, Westerly, Charlestown and South Kingstown.

Connecticut: The following towns, Stafford, Union, Woodstock, Thompson, Putnam, Pomfret and Killingly.

UNITED STATES DEPARTMENT OF AGRICULTURE,
Federal Horticultural Board, WASHINGTON, D. C.

CIRCULAR OF INFORMATION TO IMPORTERS OF NURSERY STOCK

Under the plant Quarantine Act, approved August 20, 1912, the importer of nursery stock must attend to the following conditions of entry:

(1) He must take out a permit therefor in advance. This permit should preferably be taken out by the person who is to receive the goods at final destination. A broker or commission merchant may take out a permit in his own name, if he imports for his own account, or he can act as agent for and take out the permit in the name of the actual purchaser.

(2) He must see that each package on arrival bears the proper certificate of foreign inspection. (See Regulation 6.)

(3) He must see that each package is marked in accordance with Section 3 of the Act. As a matter of convenience, this marking should also contain the additional information called for in Section 4, to avoid the trouble of remarking before the goods can be delivered for interstate shipment. The certificate and marking should preferably be on the goods before they leave the foreign port.

(4) After December 1, 1912, each shipment must be accompanied with the consular declaration called for in Regulation 9. This declaration must accompany the consular invoice and is not to be attached to the individual container.

WHAT THE IMPORTER OR BROKER MUST DO BEFORE THE GOODS CAN BE SHIPPED OR REMOVED FROM A PORT OF ENTRY

(1) He must immediately (before shipping or removal) advise the Secretary of Agriculture and State Inspectors in accordance with Section 2 and Regulation 8.

(2) He must see that each container is marked in accordance with Section 4; that is in addition to the information in the label of entry, each container must bear the name and address of the consignee at destination, where the stock is to be inspected by the State, territorial or district official. (See Section 2 and Regulation 8.)

Importers are warned that failure to meet the requirements of the law as outlined above subjects them to the penalties fixed in Section 10 of the Act.

FEDERAL HORTICULTURAL BOARD.

JAMES WILSON,

Secretary of Agriculture.

Approved:

October 15, 1912.

UNITED STATES DEPARTMENT OF AGRICULTURE,
Office of the Secretary,
Federal Horticultural Board.
NOTICE OF QUARANTINE NO. 2 (DOMESTIC)

MEDITERRANEAN FRUIT FLY

The fact has been determined by the Acting Secretary of Agriculture that an injurious insect, known as the Mediterranean Fruit Fly (*Ceratitis capitata*), new to and not heretofore widely prevalent or distributed within and throughout the United States, exists in the Territory of Hawaii.

Now, therefore, I, Willet M. Hays, Acting Secretary of Agriculture, under the authority conferred by section 8 of the act approved August 20, 1912, known as The Plant Quarantine Act, do hereby quarantine said Territory of Hawaii, and do prohibit, by this notice of quarantine No. 2, under the authority and discretion conferred on the Secretary of Agriculture by said section 8 of the Act of Congress approved August 20, 1912, the movement from the Territory of Hawaii into or through any other State, Territory, or District of the United States of the following fruits, seeds, vegetables, and other plant products:

Alligator pears.	Grapefruit.	Natal, or Kafir, plum.
Carambolas.	Green peppers.	Oranges.
Chinese ink berry.	Guavas.	Papaya.
Chinese orange.	Kamani seeds.	Peaches.
Chinese plums.	Kumquats.	Persimmons.
Coffee berries.	Limes.	Prickly pears.
Damson plum.	Loquats.	Rose apple.
Eugenias.	Mangos.	Star apple.
Figs.	Mock orange.	String beans.
Grapes.	Mountain apple.	Tomatoes.

Hereafter, and until further notice, by virtue of said section 8 of the Act of Congress approved August 20, 1912, it shall be unlawful to move any of the fruits, seeds, vegetables, or other plant products herein named from the Territory of Hawaii into or through any other State, Territory, or District of the United States, regardless of the use for which the same is intended.

Done at Washington this 18th day of September, 1912.

Witness my hand and the seal of the United States Department of Agriculture.

WILLET M. HAYS,
Acting Secretary of Agriculture.

A PROPOSED UNITED STATES COUNTRY LIFE FEDERATION

At its meeting at New Orleans, La., November 7, 1912, the Farmers' National Congress will vote to change its constitution. The new constitution proposes a country life federation of all associations, institutions and other general organizations primarily interested in country life. This federation, if formed, will include State and National Departments of Agriculture, and agricultural colleges and experiment stations as well as associations of agriculture, horticulture, live stock, etc. Each organization with less than four thousand members will be entitled to one delegate, with a fee of \$10.00. Larger organizations will be entitled to additional delegates, with an additional fee of \$5.00 per delegate. The primary purpose is to form a great national country life or agricultural society in which all existing country life organizations have a part. The membership will be in the form of delegates representing the respective societies, associations and institutions. This country life federation would be on a par with the American Federation of Labor, the American Federation of Women's Clubs, the American Manufacturers' Association, the National Education Association, and other like great national bodies.

Such a general organization would have a large work to do and would carry great weight in national agricultural matters, both in Congress and out. It is modeled on the plan of the federation of States in the National Government, hence would not affect the autonomy of its constituent associations and organizations, which would be left free

to perform their several functions. Such a great national agricultural society would be a strong factor in building up farm families in improving rural conditions throughout and also in increasing the production of farm produce for the cities.

Invitations have been sent to all organizations whose primary interest is agriculture and country life. Those not having received an invitation to send delegates to the New Orleans meeting, should send the address of their presidents and secretaries, also a copy of their constitutions to the Secretary of the Farmers' National Congress, Mr. J. H. Kimble, Port Deposit, Maryland.

SEED NOTES

Reports received from different parts of the country to date are very favorable for a good crop of most tree and shrub seeds, excepting spruce seeds from Colorado. I understand that a severe freeze and snow storm on June 17th, has ruined the prospect of a crop of Spruce seeds in certain localities of Colorado. *Picea pungens* (Colorado Blue Spruce) and *Pseudotsuga Douglassi* (Colorado Douglas Fir) are two valuable varieties that we depend upon Colorado to furnish and this year the crop is going to be exceptionally light. A report has also been received advising a very poor crop of Azalea seeds.

THOMAS J. LANE.

A CANADIAN SCENIC BOULEVARD

[From Consul Horace J. Harvey, Fort Erie, Ontario]

The boulevard being constructed by the Niagara Falls Park Commission, and to extend from the Niagara Falls Victoria Park to the old Fort Erie ruins, is nearing completion. At present there remains to be finished about two miles to bring the roadway to the village limits of Bridgeburg. This makes a finished roadway of some 18 miles. From the village limits of Bridgeburg to the old fort grounds is about three miles, the road extending through the villages of Fort Erie and Bridgeburg. The two villages have recently ceded their rights to a 66-foot strip along the river to the park commission, with the understanding that it is to complete the boulevard through the two villages during 1913.

When completed this boulevard, extending along the banks of the Niagara River from the shores of Lake Erie to Niagara Falls, will be a most beautiful drive. The boulevard will be divided into one-mile sections, each under the management of a foreman. Annual prizes will be offered for the section kept in the best order during the year. A double row of shade trees has been planted along the entire length, different varieties being restricted to certain sections. To add an educational feature it is the intention to devote certain sections to distinct varieties of flora. Cost records are to be kept of the different sections.

THE ASCENT OF SAP

How the sap ascends to the tops of tall trees in sufficient amount to supply the evaporation from the leaves as well as to form a necessary part of the plant food, has always been a puzzle to botanists. Various theories have been put forth, however, to account for it. Root pressure, capillarity, a sort of pumping action in the cells of the stem, evaporation and many others have in turn been tried and found wanting, according to the *American Botanist*. The latest and most satisfactory explanation of the phenomena is by an Irish botanist, Henry H. Dixon, who, after experimenting with water in sealed glass tubes has discovered that water has an unexpected tensile strength and under proper conditions will resist considerable stress tending to pull it apart. It requires, in fact, a tension equal to more than 150 atmospheres to sever the columns of water in the ducts of plants. Dixon assumes that the evaporation of water from the leaves sets up a pull of sufficient strength to hold the water suspended in the conducting tracts of even the tallest trees. In elaborating his theory he shows how perfectly adapted to this function the tracheids and other vessels are. Even the partitions across the ducts, which in connection with any theory concerning root pressure and capillarity would only be in the way, by the new theory are shown to be an excellent contrivance for facilitating the ascent of sap.—*American Florist*.

HORTICULTURAL ADVERTISING

BY WARREN J. CHANDLER

Within the past ten years the eyes of business men all over the world have been opened to the decided advantage of advertising, though I am sorry to say that there are still some "doubters" who are looked upon with pity by those who have "made good," by up-to-date publicity methods.

Let us look at horticultural advertising as it is today.

In the first place it is largely made up of two general efforts, advertising in publications and the personal appeal.

The latter method was for many years the chief one in the distribution of nursery stock and in analyzing it now, a great deal of the suspicion which the buyer of to-day has when purchasing, comes from the untruthful agents whose only purpose was to sell plants regardless of means used.

This deplorable method is I am sorry to say still employed by some agents and the cry of the fleeced is heard on all hands.

Thanks to the new business ideals, this bad practice will in time die a natural death.

As the field of horticulture began to support magazines they in turn enlisted the help of the nurserymen and seedmen. Today the horticultural establishment failing to advertise is finding business difficult to secure. The reason is obvious.

In viewing advertising from the nurserymen's standpoint there are several conditions which have a bearing on what should be the best methods to follow.

To reach the most practical decision requires an analysis of conditions following the answering of the questions given below.

Is my stock commercial or ornamental?

Am I seeking the trade of the dealer, orchardist or private home owner?

Shall I seek local or wide-spread business?

Will I do a mail order or agent business?

Have I a speciality or many good leaders to bring before the public?

What are my facilities for disbursing goods?

In dealing with the trade only, descriptive catalogues are not essential, but where the consumer buys direct they are, and the more thorough they are the better standing is secured at the first hearing.

The fluctuating of prices and sizes in nursery stock demands a revised price list yearly or semi-yearly.

To revise a large descriptive catalogue means not only a great amount of work, but has been proven an unwarranted expense. This has resulted in a general catalogue having few and in some cases no prices or sizes at all.

Specializing is proving to be the big factor in increasing the business of the nurserymen just as it has been in other lines of work within the past few years.

In advertising in the horticultural trade and general magazines there is much to criticise.

In the first place, I feel safe in saying that very few of these advertisers can tell you whether their publicity is profitable or not and cannot produce a detailed report on returns in full.

What has really made a good deal of this advertising successful has been the craving on the part of the public for

information and stock. The good results, therefore, have been in spite of indifferent announcements.

Of course what I have just said refers to the advertising in the garden and general magazines and not in trade papers.

The advertising in trade papers today is of a particularly poor character. How many of the announcements in a trade paper make an impression on you? Do you feel inclined to respond to any?

It would seem that the only desire on the part of those advertising is to have their name before the readers. I doubt if some will even gain this result.

How much better would a short, live advertisement be which would in a few well chosen words tell an interesting fact about some product for sale.

The advertising which is bringing results today is not of the business card kind. It tells something beside name and address.

Nurserymen must not think that the proper growing of plants is enough. They must let the buyers know about them.

Analyze your stock, get down as near to cost of production as you can, regulate your marketing prices accordingly and then get after orders.

In this last work you will need more than a knowledge of your stock. You will need a knowledge of human nature and how to tell your story to the buyers who are ready to use your goods.

If you feel any hesitancy about how to go about it, then go to a good reliable advertising agent and work out a plan with him. There is a bright, rosy future for the nurseryman who will get out now and dig, not trees alone but orders as well.

To do this efficiently he must put as much thought in his advertising as he does in his growing. The nurseryman who can attract the attention, arouse the interest is pretty sure to get the orders if his stock is good.

NEW BRAMBLES

Explorations in China during the last few years have added to our gardens a very large number of hardy trees and shrubs, some of which are of purely botanical interest, while others possess decorative qualities which warrant their inclusion amongst select ornamental subjects. Of several families which have received large additions from these introductions, the bramble or rubus family is one of the foremost, and a large number of new kinds is available. The various species differ widely in habit, says a writer in *Gardening Illustrated*, published in London, some having vigorous, upright branches, 15 feet high, others growing into sturdy clumps three to four feet in height; some producing long, slender shoots which require support, and others, again, rarely rising more than a few inches above the ground. Several have distinctly ornamental foliage, the principal interest in others being their white or bluish bark. Peculiarity of habit marks some kinds as being quite different from that of others previously in cultivation, while the fruit of a few sorts suggests that with a little improvement they would be able to compete favorably with our garden raspberries and blackberries. In the hands of the hybridist the finer fruiting forms may also have a bright future in store.

Meanwhile they are planted for their decorative qualities, and there are numerous positions for which they are well suited. A pergola planted with the stronger-growing kinds and those with long, slender branches might be made very effective. Grouped in shrubberies or in the wilder parts of the garden they are very showy, while they may also be used in conjunction with other shrubs in the formation of general shrubberies. A word or two is necessary regarding cultivation, for, although the brambles are not fastidious as to soil, the best results are only obtained when good, rich loamy soil is provided, for as a rule they are gross feeders. The removal of the old branches as soon as the flowering or fruiting season is over is very necessary, for, as in the case of the raspberry, such shoots usually die, and if left untouched spoil the appearance of the bushes and interfere with the new shoots, which grow up strongly from the base. It is very necessary that such young shoots should develop in a free and unrestricted manner, for it is from the most vigorous branches that we may expect the best leaves and most ornamental bark. A peculiarity about the leaves is the habit those of many kinds have of apeing the shape of the leaves of some other shrub or tree, and in the ensuing notes reference is made to several such cases.

Rubus lasiostylus is one of the best known of the various new Chinese kinds. Of vigorous habit, it grows from eight to twelve feet high. The raspberry-like stems are clothed with whitish bark, which makes the plant very conspicuous in winter. There are many forms already in cultivation, differences in stature, habit, and fruit being noticeable. The yellow fruits of the better forms are juicy and palatable.

R. biflorus var. *quinqueflorus* is a glorified form of the whitewashed stemmed bramble of North America. Growing at least 15 feet high, the stronger stems are as much as 4½ inches in circumference at the base. The white bark is quite as showy as that of the American kind. White flowers, each about one-half an inch in diameter, appear in May, and are succeeded by yellow fruits, which are not unlike those of the type.

R. bambusarum is an evergreen with long, slender branches, which require the support of a post, trellis, or bush. Its three-parted leaves are very distinct, for each narrow segment is dark green above and greyish beneath by reason of a dense mass of woolly hairs. Flowers and fruits are borne in large heads. The latter are black and small.

R. flagelliflorus is another slender-branched species. The leaves in this case, however, are not divided into leaflets, but are extremely handsome by reason of their irregular green margins and bronzy centers, the whole upper surface having a pretty velvety finish, the underside being pale buff. For decoration it is quite one of the handsomest, although, unfortunately, it is not one of the easiest to grow.

R. corchorifolius differs from the previously-mentioned kinds by reason of its bushy habit. Growing about four feet high, its principal point of interest lies in the similarity between its leaves and those of the common *Kerria japonica*.

R. niveus is one of the most vigorous of the newer sorts. Growing at least 15 feet high, its strong stems are remarkable for their spines, which are pale brown, rather short and stiff,

and completely surround the branches. The three-parted leaves are ornamental, but the flowers are not showy.

R. chroosepalus.—The most noticeable features about this species are its long, slender-green branches and ornamental vine-like leaves.

R. trianthus, an upright-growing kind, attains a height of eight feet. The secondary branches, which are spreading and graceful, bear good-sized, white flowers in May, and ovate leaves, which have two well-developed lobes at the base.

R. flosculosus grows about ten feet high, and forms rather slender, brownish stems, which produce large quantities of small, black fruits in July and August.

R. Swinhæi is chiefly remarkable on account of its leaves resembling those of the hornbeam, otherwise it has fewer attractions than several other kinds.

R. omiensis forms a strong-growing bush at least twelve feet high. Its leaves somewhat resemble those of a pelargonium in shape and coloring. The centers are marked with brown, and the margins are green.

R. Giraldianus is of trailing habit. Its branches frequently attain a height of 15 feet, and they are conspicuous by reason of their white bark. The rose-like leaves are pretty.

R. Veitchi also has rose-like foliage. It forms very strong, sappy shoots, which are apt to be injured by frost during winter.

R. parviflorus has been in cultivation for a longer period than the other kinds. Its branches are slender and spiny, and they grow together in a tangled mass. There is nothing attractive about the flowers, but the red fruits are very conspicuous and pleasant, although somewhat acid. It will probably prove useful to the hybridist.

R. irenæus is remarkable for its long, slender, prostrate branches, which bear heart-shaped leaves each about five inches across. To be seen at its best it should be allowed to scramble over an upturned tree-butt.

These are some of the more distinct kinds, but there are many more species, which may be obtained by anyone who contemplates extensive planting.—*American Florist*.

Members of the Federal Horticultural Board of the Department of Agriculture, who drafted the rules and regulations for carrying out the Plant Quarantine Act of August 20, 1912, as published in *The Review* of October 3, were in New York October 7 to 10 in conference at the custom house with Jesse C. Grant, deputy collector in charge of the entry division, for the purpose of getting some practical suggestions as to how the regulations could be improved upon. Some of the provisions call for a great deal of unnecessary red tape in the matter of entries, certificates of inspection and notices of shipment by importers, and it has been deemed desirable to amend the rules so as to make the procedure simpler. The board consists of W. A. Orton, Peter Bisset, A. F. Burgess and George B. Sudworth.—*Florists' Review*.

The products of the Alphine Manufacturing Co., whose advertisement appears in the present issue are worthy of investigation of all nurserymen that have not tried them. They are specialists in their line and evidently spare no pains to help the plant growers to fight insect pests and disease.

NOVEL BEE KEEPING EXHIBIT PLANNED FOR THE PANAMA-CALIFORNIA EXPOSITION

Among the many unique features of the Panama-California Exposition in San Diego, there is being planned an open air bee keeping exhibit to be installed on the exposition grounds where there will be a fully equipped apiary with honey house, extractor and tanks with everything necessary to illustrate just how bees are managed, and how all of the operations attendant upon the production and removal, packing and shipping of honey are carried on. The exhibit will also include a comb honey apiary and a queen bee rearing apartment, containing representatives of all of the varieties of bees of commercial importance and the methods employed in raising and introducing the improved strains of honey gatherers.

A novel feature of this exhibit will be plats of all the cultivated honey plants growing. The canyon will be utilized in producing a natural mountain honey range with all the native wild honey plants so famous in California growing and in full bloom, yielding their nectar to the energetic little creatures whose business in life is to lay up sweetness.

PEAT MOSS NOT A FERTILIZER

Prof. Bottomley stated at Dundee: "Peat moss litter is said to be entirely unsuited for the growth of plants; it is acid in reaction and contains no soluble humates." That it is acid in reaction we have proved over and over again hence our repeated advice to use lime on the land; that it is, apart from its manurial constituents derived from the excretion of animals, a bad form of organic matter to apply to soil deficient in this most important constituent we also know right well. Through long ages these peat mosses, as they are called, have been soaking in bogs, and the moss itself has become saturated with tannic and other acids so as to make its decay a work of years. Unless the moss decays, of course the humates would not be available to plant life. The chief interest attached to Mr. Bottomley's Paper lies in the fact that he has found that "when peat (moss) is treated with certain micro-organisms a large quantity of soluble humates is obtained and the peat is rendered alkaline." Mr. Bottomley has been of recent years the apostle of the various bacteria which effect the beneficent work for the cultivators in rendering the "food" which they apply to the soil available for plant life. We have before heard of the treatment of ordinary peat with certain bacteria, and how nitrogen was found to result from the breaking down by the bacteria of organic matter. The professor said that "an aqueous extract of this treated peat (1 part peat to 200 parts water) will supply all the plant food necessary for successful water-culture experiments," and went on to show that "no trace of nitrate was found in the cultural solution during the whole course of the experiments." He judged from this that "the nitrogen-needs of the plants were supplied by some form of organic nitrogen present in the solution." It is possible that some day when our growers become more scientific, the use of certain bacteria, on, say, such subjects as old mushroom manure, will put back all that has been lost in the culture of the mushroom crop. It is also possible that the spraying over of a green crop, such as mustard, which is to be used as a "green manure" by digging or ploughing it into the soil, with certain bacteria which operate in the breaking down of organic matter, the result may be to make such a "green manure" much more valuable to the cultivator than it even now is. These are some thoughts which occur to us as we write, and we commend them to the notice of the author of this Paper. It was also stated that "Water cultures with tomato seedlings germinated in sterilized sand showed that the plants failed to grow in the raw peat extract, but in treated peat extract the plants grew well, flowered and produced fruit. Experiments with buckwheat, radishes and barley gave similar results." Of course, all this needs the fullest verification before it can be laid down as exact science, but from what we know personally of Prof. Bottomley we have no doubt that he has made no mistake in his findings.—*Fruitgrower Fruiterer and Florist.*

THE REFRIGERATION EXPOSITION, 1913

The third International Congress of Refrigeration, which is to be held in America during the month of September next year, was brought to this country through the medium of an invitation issued by the

President of the United States under authority of a joint resolution of Congress and extended to the delegates in attendance at the meeting held in Vienna in 1910. The wonderful progress made in refrigeration methods will undoubtedly make this the most important congress yet held, and in order that the delegates and visitors may have every opportunity for practical comparison on matters affecting refrigeration and in keeping with custom, there will be launched an exposition of magnitude commensurate with the importance of the congress, and which will be held in Chicago during the period of the congress.

The organization of an association to put on this exposition is now under way and as soon as incorporated, the work will be commenced. It is the desire of the men behind the enterprise, who by the way are the same men who have devoted their time and energy to the securing of this congress, that the industries that will participate in the cold storage division make all preparations now. The exposition being held in September makes it particularly necessary that the apple, fish and poultry interests utilize the present season to select and prepare their exhibits.

This notice may be accepted as official that the show will be held, and as rapidly as possible the allied interests through their associations and individual organizations will receive communications direct as to the extent and scope of the exposition. This exposition will afford an extraordinary opportunity to advance the cause of refrigeration and every possible support should be rendered by the direct and allied interests.

NINTH ANNUAL MEETING OF AMERICAN BREEDERS' ASSOCIATION

Will be held at Columbia, South Carolina, January 24, 25, and 27, 1913, just preceding the opening of the American Corn Exposition.

Students of Heredity and Eugenics, Improvers and breeders of live stock, poultry, field, garden and horticultural crops are invited to attend.

Write for program and particulars. Reduced rates.

Sept. 11, 1912.

Secretary A. B. A., Washington, D. C.

INDIANA APPLE SHOW

The Indiana Apple Show which will be held at Indianapolis, November 13-19, 1912, has a good live management and will undoubtedly be a success.

AMERICAN BLIGHT ON THE ROOTS OF APPLE AND OTHER TREES

Every gardener and fruit grower who has this pest to contend with knows what a great trouble it is. I have made many trials, and had many failures, but this year I have met with a simple agent that is in every way effectual. After root growth is finished for the season (and this is very important), make some holes round about any trees which are infested at their roots with the woolly louse, either with a dibbler, stake, or crow-bar, at depths varying from 9 in. to 18 in., and into these holes insert small pieces of about one-half ounce each in size of carbide of calcium, close the holes up quickly as the work proceeds, and the land becomes fumigated. The roots of the trees are cleansed to an astonishing degree, and no harm is done to vegetation. May I state here that I have found this fumigant good to rid land of grub and wireworm attacking the Carrot crop?

This easy remedy I have applied for four or five years, and having prevailed on many another to try the plan, who have met with success, I have every confidence in placing it before the gardening world as second to none to cleanse trees of American blight on roots, and also for many other pests attacking vegetation, viz., cauliflowers, carrots, onions, roses, fruit trees, etc.—J. S. Durham, *The Journal of Horticulture*.

WHAT IS IT?

A new destructive pest which threatens the apple orchards of western Michigan has been discovered here. The insect is brown in color, very small and has two sets of wings. It bores a fine hole in the tree, beginning its work at sundown and always on the southeast side of the tree near the base, and sips the sap. Various poisons have been tried, but without effect.—*Fruit Trade Journal*.

Catalogues Received

H. M. Hardyzer, Boskoop, Holland. Wholesale catalogue.
 King's Acre Nurseries, Hereford, England. Trade catalogue for autumn and spring 1913 of Fruit Trees, Roses, Clematis, etc.
 Alma Nurseries, Farnham and St. John's Nursery, Woking, England, special advance trade offer of roses.
 Chas. Detriche, Sr., Angers, France. Jackson & Perkins Co., Newark, N. Y., sole agents. Wholesale price list of nursery stock.
 Foster Cooke Nursery Co., Fredonia, N. Y. Wholesale price list.
 J. Van Lindley Nursery Co., Pomona, N. C. Wholesale trade list.
 Wm. H. Moon Co., Morrisville, Pa. Autumn edition of hardy trees and plants for every place and purpose.
 Levavasseur & Sons, Orleans and Ussy, France. Abridged trade list of roses and shrubs.
 William Barron & Son, Ltd. Borrowash near Derby, England. Special trade offer trees.
 H. C. Hale Nursery Co., Winchester, Tenn. Wholesale price list for Fall 1912 and Spring 1913.
 W. N. Scarff, New Carlisle, Ohio. Semi annual surplus list of choice new and standard bush fruits.
 D. H. Henry, Senece Nurseries, Geneva, N. Y. Surplus list.
 Leedle Floral Company, Springfield, Ohio. "First Aid to Buyers" also surplus list of Roses.
 Winfield Nursery Company, Winfield, Kans. Wholesale price list.
 E. H. Graves, successor to Jackson Co., Nurseries, "Apple Seedlings" Lee's Summit, Mo.
 Southern Nursery Company, Winchester, Tenn. Catalogue of high grade trees and shrubs.
 J. B. Pilkington, Portland, Ore. A very cheerful looking brand new catalogue of tree shrubs, vines and plants for the seasons of 1912 and 1913.
 F. & F. Nurseries, Springfield, N. J. Trade list for Fall, 1912.
 Bloodgood Nurseries, Flushing, L. I., N. Y. Price list for Fall, 1912 and Spring, 1913.
 Franklin Davis Nursery Co., Baltimore, Md. Wholesale price list for Fall, 1912 and Spring, 1913.
 Texas Nursery Company, Sherman, Texas. Fall, 1912 Wholesale Price List.
 Glen St. Mary Nurseries Co., Glen St. Mary, Fla. 1913 Catalogue containing a great many prettily colored half tones of nuts, fruits, roses and shrubs.
 Milton Nursery Co., Milton, Ore., "Millers' Guide to Trees, Shrubs and Plants." A real classy catalogue, one of the best of the season.
 Chase Nursery Co., Huntsville, Ala. Wholesale price list for Fall, 1912.
 Frank Wild Floral Co., Sarcoxie, Mo. Price list of Phlox, Iris, Peony, Day Lily and other hardy, herbaceous flowering plants.
 Conyers B. Fleu, Jr., Germantown, Phila., Penn. Price list of Tree, Shrub and Fruit Seeds, for ornamental and forestry purposes.
 Conard & Jones Co., West Grove, Penn. New Floral Guide for Autumn.

Elm City Nursery Company, New Haven, Conn. Catalogue for Autumn planting of Evergreens, Herbaceous plants, trees and shrubs, strawberry plants in pots, etc.

Henry A. Dreer, Chestnut St., Philadelphia, Penn. Wholesale price list of Bulbs, plants, flower seed for florists.

Rielly Bros., Dansville, N. Y. Surplus list.

Youngers & Company, Geneva, Nebr. Bulletin No. 1 for Fall planting.

Forest Nursery & Seed Company, McMinnville, Tenn. Wholesale trade list.

Merrick Bros., Eden Nurseries, Stowmarket, England. Special offer of Roses.

H. Merryweather & Son, Ltd., Southwell, Notts, England. Advance trade list of Roses.

Whiting Nursery Co., Yankton, S. D. Trade list of surplus stock.

Vincent Lebreton's Nurseries, Angers, France. Wholesale trade list.

Green's Nurseries, F. D. Green, Farmville, Va. Semi-Annual wholesale price list.

James Vick Sons, Rochester, N. Y. Bulb catalogue.

William Street Nurseries, Geneva, N. Y. Surplus list.

Xenia Star Nurseries, Xenia, Ohio. Wholesale price list.

E. Y. Teas & Son, Centreville, Ind. Wholesale price list.

L. L. May & Company, St. Paul, Minn. Wholesale trade list.

Corry & Co., Ltd., London, England. Bulb bowls and etc.

J. Jenkins & Son, Winona, O. Wholesale net cash trade price list.

Osman & Coy, Ltd., Horticultural Sundriesmen, London, E. England. New bulb bowls.

L. R. Taylor & Sons, Topeka, Kans. "Apple Seedlings".

Morris Nursery Co., West Chester, Penn. Trade list.

P. J. Berckmans Co., Augusta, Ga., 1912 and 1913 catalogue which is rather attractive looking and well illustrated.

Jewell Nursery Co., Lake City, Minn. Trade list—prices on surplus stock to nurserymen and dealers only.

Southwestern Nursery Company, Okemah, Okla. Wholesale fall trade list.

C. G. Olie, Boskoop, Holland. Special offer of Evergreens, Rhododendrons, paeonies, and etc.

J. G. Harrison & Sons, Berlin, Md. "The Why and How of Shade Trees and Evergreens".

A. & B. Shedaker, Burlington, N. J. Trade list of asparagus roots, vegetable seeds, rhubarb, and etc.

T. S. Hubbard Company, Fredonia, N. Y. Wholesale price list, autumn 1912.

F. W. Kelsey Nursery Co., 150 Broadway, N. Y. Wholesale price list of Trees, shrubs and hardy plants.

Turkey Creek Nurseries, Macclenny, Fla. Wholesale price list for Fall.

Matthew W. Smith, Darley Dale, nr Matlock, England. Trade list of nursery stock.

Central Horticultural Agency, Ipswich, England. Fall price list.

Arthur Charlton & Son, Tunbridge Wells, Kent, England. Special offer of Herbaceous and Alpine plants to the trade only.

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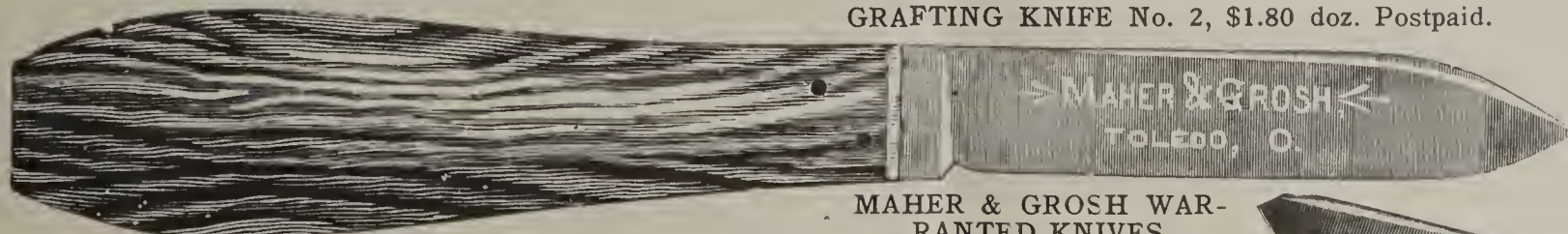
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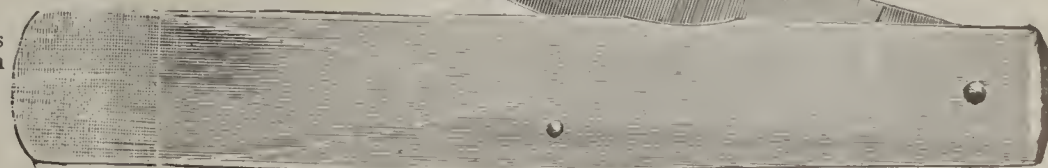
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APPLE. 1 in. up; $\frac{3}{4}$ to 1 in.; $\frac{5}{8}$ to $\frac{3}{4}$ in., and smaller grades. Long on commercial sorts.

CHERRY. 1 in. up; $\frac{3}{4}$ to 1 in., and all smaller grades. Specially attractive proposition on Cherry in car lots.

PEACH. 1 year and June buds.

PEAR. Long on Kieffer and Garber, all grades.

FIGS, JAPAN PERSIMMON, MULBERRY, GRAPE, EVERGREENS, SHADE TREES

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Your want list will be appreciated

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THE AMERICAN FLORIST TRADE DIRECTORY

Edition
of 1912

OF THE ENTIRE HORTICULTURAL TRADE OF AMERICA
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A complete alphabetical list of all American cities, with the names and addresses of all commercial horticulturists therein. A separate list, arranged alphabetically, of every commercial horticulturist in this country. These lists are keyed to indicate the special line or lines of each establishment. The book also contains special lists as follows:

Park Superintendents,	Horticultural Societies,*	Florists' Clubs,*
Landscape Gardeners,	Experiment Stations,*	Foreign Houses,
Trade Associations,*	Botanical Gardens,	Catalogue Firms,
Leading Cemeteries,	Postage Rates,	Express Rates,
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*With new officers to date.		Statistics.

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Fumigation with Hydrocyanic Acid Gas Generated From Cyanide ⁹⁸/₉₉%

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Scale and other Insect Pests. Endorsed
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FRUIT AND SEED FARMS

OFFER for Fall 1912

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all cleaned and guaranteed
first class.

Correspondence solicited. Price list upon request.

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Long Distance Phone and Telegraph, Salisbury, Md.

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[(THE JAPAN NURSERY CO., Ltd.)]

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JACKSON & PERKINS, NEWARK, N. Y.

J. H. SKINNER & CO.

Station "A," Topeka, Kansas.

**Fruit, Shade and
Ornamental Trees**

∴ FLOWERING SHRUBS ∴
APPLE AND PEAR SEEDLING
∴ FOREST TREE SEEDLING ∴

WE OFFER

For FALL 1912

Grape Vines, Currants and Gooseberries
in all varieties and Grades

—also—

Grape and Currant Cuttings and Light
Grade of Vines for Lining Out
in Nursery Rows

WRITE FOR PRICES

F. E. SCHIFFERLI, Fredonia, N. Y.

Vincennes Nurseries

Vincennes, Ind.

W. C. REED, Prop.

We are pleased to offer for Fall, 1912, and Spring, 1913,

CHERRY—Two Year. All leading sour varieties.

CHERRY—One Year. General list leading sorts sour and sweets.

PEACH—One Year. 30 varieties.

APPLE—Two Year. All grades.

APPLE—One Year. Cut Backs very strong.

SILVER MAPLE. All grades.

Can furnish the above in Carload Lots or less. Also Pear,
Plum, Quince, Compass Cherry, Currants, Gooseberry, Catalpa
Speciosa and ornamentals in good assortment.

Please submit list of wants for prices. Personal inspection
invited.

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply
this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list
ready end of September.

The Willadean Nurseries

SPARTA, KY.

We have a splendid stock of
Grape Vines

and other small fruit plants for the Nursery
trade, graded up to the highest standard
and sure to please you.

Give us a trial order, send in your list now for quotations

WILLETT & WHELOCK

North Collins, N. Y.

Do you realize that the Simmons Bill prevents the importation of White Pine?

This will enlarge the great demand for the native grown product and early exhaust the supply.

Have you ordered your share of our superb stock of more than a million transplanted White Pines? If the order has not been sent it should be hurried forward.

Write at once for quotations on transplanted and seedling grades of White, Red, Scotch and Austrian Pines, Larches, Spruce and Arborvitaes.

PRICES The Most Reasonable in the **PLANTS**
Country for First Quality

THE NORTH-EASTERN FORESTRY CO.
NEW HAVEN, CONN.

C. & J. Well KNOWN GROWN Shrubs and Roses

Althea Banner, 4 to 5 ft.
Banner, 18 to 24 in.
Banner, 5 to 6 ft.
Banner, 2½ to 3 ft.
Althea Bicolor, 18 to 24 in.
Bicolor, 3 to 3½ ft.
Bicolor, 3 to 4 ft.
Althea Jeane d'Arc, 3 to 4 ft.
Jeane d'Arc, 18 to 24 in.
Jeane d'Arc, 5 ft.
Jeane d'Arc, 2 to 3 ft.
Jeane d'Arc, 4 to 5 ft.
Althea Meehani, 8 to 10 in.
Meehani, 12 to 18 in.
Meehani, 18 to 24 in.
Althea Pink, 18 to 24 in.
Pink, 2 to 3 ft.
Pink, 3 to 4 ft.
Althea Red, 18 to 24 in.
Red, 3 to 4 ft.
Althea Violet, 12 to 18 in.
Violet, 18 to 25 in.
Azalea Mollis Yellow, 18 to 20 in.
Azalea Mollis Named Sorts, 18 to 20 in.
Mollis, Red, 18 to 20 in.
Mollis, 6 to 8 in.
Barberry Thunbergii, 18 to 24 in.
Thunbergii, 12 to 18 in.
Thunbergii, 6 to 8 in.
Crurnells, 3 to 4 ft.
Crurnells, 2 to 2½ ft.
Crurnells, 3 ft.
Deutzia Crenata, 2½ to 3 ft.
Crenata, 3 to 6 ft.
Crenata, 4 to 5 ft.
Deutzia Gracilis, 8 to 10 in.
Gracilis, 10 to 15 in.
Deutzia Gracilis Rosea, 10 to 12 in.
Gracilis Rosea, 2 to 3 ft.
Gracilis Rosea, 2 to 2½ ft.

Deutzia Lemoinii, 12 to 14 in.
Lemoinii, 2 ft.
Deutzia Pride of Rochester, 2½ to 3 ft.
Euonymus Japonica, 2 yr., 12 in.
Radicans, 2 yr., 12 in.
R. Variegata, 2 yr., 12 in.
Forsythia Golden Bell, 12 to 15 in.
Golden Bell, 3 to 4 ft.
Hydrangea Paniculata Grandiflora,
3 to 3½ ft.
Paniculata Grandiflora,
2½ ft.
Paniculata Grandiflora,
12 to 18 in.
Hydrangea Arborescens, 12 to 18 in.
Arborescens, 2 to 3 ft.
Philadelphus Single, 2 to 3 ft.
Single, 4 to 5 ft.
Single, 3 to 4 ft.
Philadelphus Double, 2 to 3 ft.
Double, 4 to 5 ft.
Privet California, 18 to 24 in.
California, 5 to 6 ft.
California, 12 to 18 in.
California, 2 to 3 in.
Spirea Anthony Waterer, 5 to 6 in.
Anthony Waterer, 12 in.
Anthony Waterer, 2 ft.
Spirea Prunifolia, 3 to 4 ft.
Prunifolia, 12 to 15 in.
Prunifolia, 3 to 3½ ft.
Prunifolia, 3 to 4 ft.
Spirea Van Houttei, 10 to 12 in.
Van Houttei, 3 to 4 ft.
Van Houttei, 4 to 5 ft.
Van Houttei, 12 to 18 in.
Spirea Forbelli, 2 ft.

Viburnum Opulus, 4 to 6 ft.
Opulus, 3 to 4 ft.
Opulus, 18 to 24 in.
Viburnum Plicatum, 3 to 4 ft.
Plicatum, 5 to 6 ft.
Plicatum, 3 to 3½ ft.
Plicatum, 12 to 18 in.
Weigela Candida, 2 to 3 ft.
Candida, 5 to 6 ft.
Eva Rathke, 4 ft. xxx
Eva Rathke, 2½ to 3 ft.
Eva Rathke, 2 to 2½ ft.
Eva Rathke, 2 to 3 ft.
Eva Rathke, 12 to 18 in.
Eva Rathke, 18 to 24 in.
Eva Rathke, 4 to 6 ft.
Eva Rathke, 3 to 4 ft.
Rosea, 18 to 24 in.
Rosea, 3 to 4 ft.
Rosea, 4 ft. xxx
Variegata, 12 to 18 in.
Variegata, 3 to 4 ft.

CLIMBERS

Honeysuckle Heckrottii, 3 ft.
Heckrottii, 8 to 12 in.
Honeysuckle Red-Coral, 3 ft.
Red-Coral, 8 to 10 in.
Red-Coral, 3 to 4 ft.
Honeysuckle Evergreen, 18 to 24 in.
Evergreen, 2 to 3 ft.
Honeysuckle Halliana, 18 to 24 in.
Honeysuckle Tatarica Yellow, 2½ to 3 ft.
Honeysuckle Golden, 12 to 18 in.

ROSES—Climbers

Universal Favorite, 3 yr.
Violet Blue, 3 yr.

Violet Blue, 1 yr.
American Pillar, 1 yr.
American Pillar, 2 yr.
American Pillar, 3 yr.
Dr. Van Fleet, 1 yr.
Dr. Van Fleet, 2 yr.
Miss Messman, 1 yr.
Excelsa, 1 yr.
Lady Gay, 1 yr.
Hiawatha, 1 yr.
Hiawatha, 2 yr.
White Dorothy, 2 yr.
White Dorothy, 1 yr.
Gardenia, 1 yr.
Dorothy Perkins, 1 yr.
Flower Fairfield, 1 yr.
White Rambler, 3 yr.
No Light, 1 yr.
No Light, 2 yr.
No Light, 3 yr.
Farquhar, 1 yr.
Farquhar, 2 yr.
Farquhar, 3 yr.
Ruby Queen, 1 yr.
Ruby Queen, 2 yr.
Ruby Queen, 3 yr.
May Queen, 1 yr.
May Queen, 3 yr.
Alba Rubifolia, 1 yr.
Evangeline, 1 yr.
Evangeline, 2 yr.
Evangeline, 3 yr.

SPECIALS

Sir Thomas Lipton, 3 yr.
Sir Thomas Lipton, 3 to 4 ft.
Rugosa Magnifica, 12 to 18 in.
Alice Aldrich, 18 to 24 in.

F. O. B. WEST GROVE—UNLESS BY THE CARLOAD. BOXING AT COST

THE CONARD & JONES CO., WEST GROVE, PA.

ORNAMENTAL STOCKS

NURSERIES
420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.
300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New and Old Ornamental Trees & Shrubs in all Sizes.
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
400 varieties of Perennials.
800 varieties of New and Old Roses.

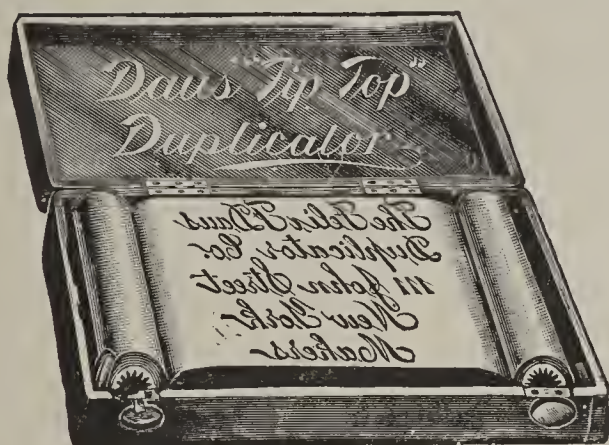
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BARBIER *and* CO., Successors,

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on account of its low price (\$5.00), but the fact that it is used and endorsed by the N. Y. Central Railroad, U. S. Steel Corporation, Westinghouse Electric Co., etc., proves that the work done must be first-class. High-class endorsements are strong arguments, but we do not depend upon them to sell our Daus' Tip Top, preferring to have you try it yourself, before buying, by taking advantage of our offer of **10 Days' Trial Without Deposit.**

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V.G.'S Means **VERY GOOD**

AMPELOPSIS VEITCHII, strong first size.
ARISTOLOCHIA SIPHO (Dutchman's Pipe)
ANDROMEDA'S, Floribunda, Japonica, etc.
ACER POLYMORPHUM ATROPURPUREUM (Japan Maple)
CLEMATIS, all sorts, field or potgrown plants
CONIFERS in the very best hardy kinds (all sizes)
BUXUS, bushes, pyramids, standards, globes, etc.
KOSTER BLUE SPRUCES (Compacta) from 1 to 9 feet
KALMIA LATIFOLIA (Mountain Laurel)
FUNKIA und. var. and Subcordata
MAGNOLIAS in all varieties (full of buds)
RHODODENDRONS, hardy Parsons, select varieties (budded)
ROSES, dwarfs or standards, old and new varieties
SHRUBS, field or potgrown of all kinds

Don't Fail to get a stock of our famous H. T. Rose, *Mevrouw*,
G. W. van Gelderen.

MAIL YOUR SHORT LIST OF THE ABOVE ARTICLES AT ONCE TO

G. W. VAN GELDEREN
BOSKOOP, HOLLAND

English Nursery Stock

Extensive stock of **RHODODENDRONS**, English grown, hardy kinds a specialty. *These are specially grown for America.* Bushy, well-grown plants, budded, $1\frac{1}{2}$ to 2 ft., 2 to $2\frac{1}{2}$ ft., and a few kinds $2\frac{1}{2}$ to 3 ft. **ANDROMEDA**, **AZALEA**, **KALMIAS**, etc., a good stock. **HARDY CONIFERS**, a large stock. Low prices can be quoted on all Conifers. **ORNAMENTAL EVERGREEN TREES**, **FRUIT TREES**, trained and in pots. **TRANSPLANTED FOREST TREES**, **FRUIT TREE STOCKS**, etc.

ROSES, dwarf and standard—all leading kinds in quantity. **MANETTI STOCKS**, 1-yr., fine.

The stock is in excellent condition. *First grade stock only supplied.* Thirty years successful trading in the States. No agents. Write direct for wholesale catalogue.

Walter Charles Slocock
Goldsworth Nursery

Half an hour's rail from London by
L. & S. W. Ry., Main Southampton Line.

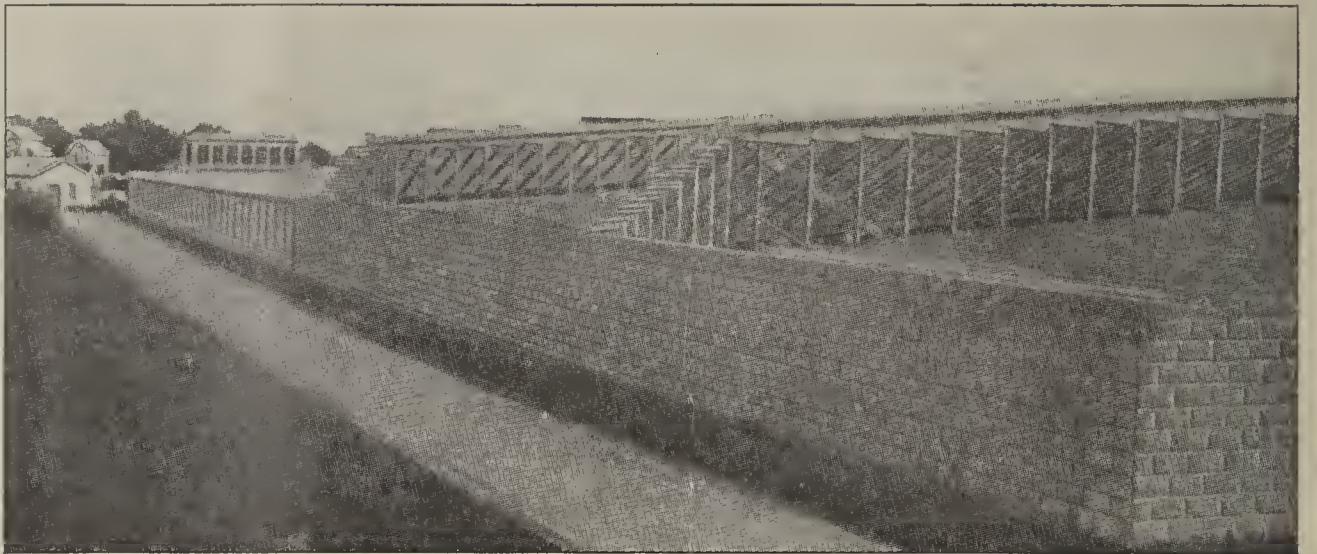
WOKING
Surrey, Eng.

What Harrisons are doing to Help You fill Orders Quick

During the past summer we built a new packing house, which doubles the packing space at our nurseries. A new concrete platform, three hundred feet long and thirty-six feet wide, enables us to handle boxes from house to cars in the shortest possible time. A new system of routing the orders cuts down the filling time.

You will find that these improvements will work to your advantage when you want stock in a hurry. Sometime during the year you will find that your stock of fruit trees or ornamentals is running low—usually this comes in the busy season, when you want the stuff and want it quick. When such a time comes our facilities will enable us to supply your needs in the very shortest time possible. There will be no delay, and you can continue to fill your customer's orders without serious loss of time.

You may find something in this surplus list of fruit trees for either present or future needs. We can also furnish a splendid assortment of Norway, Silver and Sugar Maples, Oriental Plane, Catalpa, Carolina Poplar, Elm, Linden and Black Walnut. In Evergreen we have Norway Spruce, Colorado Blue Spruce, Koster's Blue Spruce, Arborvitæ, Cypress, Fir, Pine and Juniper. All trees are Harrison grown—from root to top they are a Harrison product.



New addition to Packing Shed. 45000 square feet floor space. Concrete packing rooms and loading platform

APPLE, two-year

	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.
	1 in.	1 1/8 in.	1 1/4 in.	1 1/2 in.
Aiken Red.....	100	100	40	
A. G. Russett.....	100	100	100	
Apple of Commerce.....	50	50	50	
Arkansas Black.....	100	100	100	
Ben Davis.....	500	2500	2000	1000 500
Baldwin.....	500	500		
C. R. June.....	100	500	500	50
Canada Red.....	25	25	25	25
Carthouse.....	25	25	25	25
Cooper's Market.....	100	100	100	50
Chenango Strawb.....	50	50	50	50
Coffelt Beauty.....	50	50	50	25
Dominie.....	50	100	100	50
Duchess.....			500	200 50
Early Harvest.....	200	2000	2000	1000 100
Early Melon.....		50	50	50
Early Strawberry.....		200	200	200 100
Fall Pippin.....		100	100	50 50
Fanny.....		20	20	20
Flora Belle.....		20	20	20
Fallowater.....	200	1000	1000	500 100
Gravenstein.....		100	500	500 200
Golden Sweet.....	50	200	200	100 50
Golden Beauty.....	300	1500	1000	200 100
Hyslop.....		700	700	500 200
Hubbardston.....		500	500	300 200
Ingram.....		25	25	25 25
Jonathan.....		500	500	500 200
Jefferies.....		25	25	25 25
King.....	25	200	100	50 50
Kinnard's.....		25	25	25 25
Lawver.....	25	50	50	50 50
Lankford.....	25	50	50	50 50
Late Raspberry.....		50	50	50 50
Longfield.....		30	30	30 30
Mann.....		400	300	300 100
Martha.....		50	50	50 50
Missouri Pippin.....	100	500	400	200 100
Myrick.....		50	50	25 25
N. W. Greening.....	200	1000	1000	500 200
Nero.....	100	1000	500	500 200
Opalescent.....		50	50	50 50
Panes' Late Keeper.....		50	50	50 50
Pewaukee.....	20	25	25	25 25
P. W. Sweet.....	50	500	500	300 200
Rambo.....	50	500	500	300 200
Red Astrachan.....	500	5000	4000	3000 1000
R. I. Greening.....	100	500	500	300 100
Roman Stem.....		50	50	50 50
Springdale.....		50	50	50 50
Salome.....		25	25	25 25
Senator.....		25	25	25 25
Smith Cider.....	100	500	300	200 200
Spitzenburg.....		2000	2000	1000 200
Sweet Bough.....		25	25	25 25
Stark.....	1500	1000	1000	500 300
Scott's Winter.....		50	50	50 25
Townsend.....		50	50	50 50

Transcendent.....	400	2000	1000	300	200
Walbridge.....	20	100	50	50	50
Wealthy.....		500	500	100	100
Winter Banana.....	100	500	300	200	
Wolf River.....	100	500	500	500	200
Winesap.....	500	3000	3000	2000	1000
York Imperial.....	5000	10000	10000	10000	5000
Yellow Belleflower.....	50	500	500	100	100
Yellow Transparent.....	5000	8000	8000	2000	1000

APPLE, (budded) one-year

	5-6 ft.	4-5 ft.	3-4 ft.	2-3 ft.	1-2 ft.
	5/8 to 1 1/8 in.	1/2 to 5/8 in.			
A. G. Russett.....	500	500	100	100	100
Alexander.....	1000	1000	500	500	100
Baldwin.....	10000	10000	5000	2000	500
Benoni.....	150	50	50		
Ben Davis.....	5000	5000	5000	1000	300
Bismarck.....	100	50	50		
C. R. June.....	300	200	100		
Coffelt Beauty.....	100	100	70		
Cooper's Market.....	200	100	40		
Carthouse.....	200	100	100	50	
Chenango Straw.....	300	200	100	50	
Dominie.....	200	200	100	50	
Duchess.....	3000	2000	1000	500	
Early Harvest.....	4000	3000	1000	500	
Early Strawberry.....	200	200	50	50	
Ensec.....	50	50	50	50	
Early Colton.....	50	50	50	50	
Fall Pippin.....	50	50	50	50	
Fallowater.....	1000	1000	500	200	100
Fourth of July.....	1000	1000	1000	1000	300
Fanny.....	50	50	50	50	
Grimes' Golden.....	5000	5000	5000	1000	500
Gravenstein.....	2000	2000	500	100	100
Gano.....	6000	6000	2000	500	200
Golden Beauty.....	500	500	500	100	
Hyslop.....	200	300	50	50	
Ingram.....	200	100	50	50	
Jonathan.....	5000	5000	2000	1000	500
Jefferies.....	100	50	50	50	
Kinnard's Choice.....	200	100	50	50	
King.....	1500	1500	200	200	100
Lawver.....	50	50	50		
Lankford.....	50	50	50		
Longfield.....	100	50	50		
Limbirtwig.....	100	100	50	50	
McIntosh.....	8000	8000	2000	1000	500
M. B. Twig.....	10000	10000	500	200	50
Missouri Pippin.....	300	200	50	50	
Maiden's Blush.....	200	100	50	50	
Mann.....	100	50	50		
Martha.....	200	100	100		
Myrick.....	100	100	50	50	
Nero.....	1500	1000	300	200	200
N. W. Greening.....	2000	1500	500	200	200
P. W. Sweet.....	1000	500	300	200	200
Porter.....	100	50	50	50	
Pewaukee.....	50	50	50		
Rome Beauty.....	5000	5000	1000	500	500

R. I. Greening.....	1500	1000	300	200	200
Rambo.....	1000	1000	200	100	100
Red Astrachan.....	6000	4000	1000	300	200
Rolfe.....	100	100	50	50	
Rawlcs Janet.....	200	100	50	50	
Stayman Winesap.....	10000	10000	10000	10000	5000
Stark.....	5000	2000	200	200	
Smith Cider.....	200	100	100	50	
Smokehouse.....	1000	800	100	100	
Sweet Bough.....	1000	500	200	100	
Spitzenburg.....	1000	500	100	50	
Springdale.....	100	100	50	50	
Salome.....	200	100	100	40	
Scott's Winter.....	50	50	50	50	
Transcendent.....	3000	1000	500	500	100
Talman Sweet.....	1500	800	100	100	
Wm. Early Red.....	2000	1000	500	500	200
Wealthy.....	5000	5000	1000	500	200
Winesap.....	10000	10000	10000	10000	1000
Wagner.....	1000	1000	500	200	
Winter Banana.....	3000	1000	500	100	
Wolf River.....	4000	2000	500	200	
Walbridge.....	500	200	100		
York Imperial.....	10000	10000	10000	10000	5000
Yellow Transparent.....	10000	10000	10000	10000	5000
Yellow Belleflower.....	200	100	100	50	

CHERRY, two-year

	5-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.
	1 in.	3/4 in.	5/8 in.	1/2 in.
Baldwin.....	50	200	100	100
Black Tartarian.....	100	500	300	100
English Morello.....			50	50
Early Richmond.....	200	5000	4000	1000
Gov. Wood.....	100	200	200	200
Late Duke.....	50	200	200	200
May Duke.....		15	10	
Montmorency.....	100	1000	500	300
Napoleon.....	50	200	100	50
Olivet.....		100	100	100
Schmidt's.....		100	100	100
Wragg.....		50	30	
Windsor.....		100	100	40
Yellow Spanish.....	100	200	200	50

GRAPES, two-year

10000 Concord 10000 Moore's Early

PEACH, one-year

	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.	2-3 ft.	1-2 ft.
	3/4 and up	5/8 to 3/4 in.	1/2 to 5/8 in.	3/8 to 1/2 in.		
Alexander.....	100	100	100	100	50	50
Ad. Dewey.....	100	100	100	100	50	50
Ark. Beauty.....	100	100	100	100	50	50
Belle Georgia.....	5000	5000	5000	5000	2000	1000
Bray's Rareripe.....	100	100	100	100	50	50
Bilyeu's.....	1000	2000	1000	500	100	100
Crosby.....	100	100	100	100	50	50
Carman.....	2000	2000	2000	1000	500	500
Chair's Choice.....	1000	1000	500	500	500	200

Harrison's Nurseries
J. G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Designed and written by The McFarland Publicity Service, Harrisburg, Pa.

W. F. HUMPHREY, PRINTER, GENEVA, N. Y.



THE NATIONAL NURSERYMAN



DECEMBER, 1912

Published Monthly at Rochester, N.Y., U. S. A., in Behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General.

THE MONROE NURSERY

Established 1847.

OFFER A GENERAL LINE OF

Choice Nursery Stock

CHERRY and STD. PEAR

of Extra Fine Quality.

If you are in the market for superior trees write
us for prices.

I. E. Ilgenfritz' Sons Co.
MONROE, MICH.

EVERGREENS

OUR LEADING SPECIALTY

RHODODENDRONS, HEMLOCKS, WHITE
PINES, BOX BUSH. A general collection
of specimen ornamentals.

ALSO

NORWAY MAPLES, PIN OAKS, IBOTA
PRIVET, SPIRAEA VAN HOUTTEI
by the thousand.

Andorra Nurseries,

WM. WARNER HARPER, Prop.

CHESTNUT HILL, PHILA., PA.

MOUNT ARBOR NURSERIES

E. S. WELCH, Proprietor

136 Center St., Shenandoah, Iowa

APPLE SEEDLINGS—Fine lot, healthy and free
from disease. Special low prices until surplus
is sold.

APPLE and PEAR GRAFTS—Made to order.

APPLE TREES—in car lots. Large assortment.

ORNAMENTAL TREES—in car lots. American
Ash, American Elm, American Sycamore, Silver
Maple, Carolina, Norway and Lombardy Poplars.

Complete Line General Nursery Stock for Wholesale Trade.

CORRESPONDENCE AND INSPECTION INVITED

THE JEWELL NURSERY CO.

LAKE CITY, MINNESOTA

Wholesale Nurserymen

Established 1868

1500 Acres

SPECIALTIES FOR FALL 1912

NORWAY AND CAROLINA POPLAR

2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8, 8 to 10, 10 to 12 ft.

BOX ELDER, ASH, ELM SEEDLINGS All Sizes.

AMERICAN BASSWOOD AND SOFT MAPLE TREES

100,000 CURRANTS, Red and White.

75,000 McINTOSH, JONATHAN, BELLFLOWER,

WINESAP, Etc., 2-year, fine stock.

THREE YEAR APPLE in all Hardy Varieties.

THREE YEAR CRAB

YELLOW DOGWOOD

SNOWBALL

HYDRANGEA

WRITE FOR SPECIAL PRICES.
LET US PRICE YOUR GENERAL WANT LIST.

Now is the time to place your orders for
Direct Importations

from European Nursery Centers

FRENCH FRUIT STOCKS

Apple, Pear, Myrobolan, Mahaleb, Maz-
 zard Seedlings, Manetti, Multiflora and
 Quince stocks. Also full line of Orna-
 mental for lining out, from Vincent Le-
 breton's Nurseries, Angers. Best pack-
 ing and grading. December or February
 shipment from France.

Boskoop, Holland, Nursery Stock

Boxwood (pyramids, bushes, standards,
 ball-shape, etc). Roses, Tree Roses, Rho-
 dodendrons, Azaleas, Magnolias, Koster
 Blue Spruce, Evergreens, Hydrangea P.
 G., etc., etc., from Schaum & Van Tol,
 Boskoop.

DECIDUOUS TREES

Norway and Schwedler Maples, Tillas,
 Elms, Chestnuts, Oaks, Planes, Thorns,
 etc., etc., etc., straight stems and good roots,
 careful selection, best packing from Union
 Nurseries, Oudenbosch, Holland.

Besides representing the above firms
 as Sole American Agents, we import to
 order

FROM JAPAN AND ENGLAND

English Manetti, Gooseberries 2 and 3-yr.
 (Whinham Industry, Whitesmith, etc.),
 Japanese Nursery Stock and Lilies.

BAY TREES. Standards, Pyramids and
 all shapes from Belgium, Fall or Spring
 shipment.

RAFFIA. Red Star Brand and four
 other grades; also dyed Raffia in 20 colors.

WRITE US for catalogs, special lists,
 etc., stating the class of stock you are
 interested in.

SHIPPING. We have our own Custom
 House Dept., with shipping connections
 at Havre, Hamburg, Rotterdam, Antwerp,
 Southampton, etc.

McHutchison & Co.

17 Murray St.
 New York

The Import
 House

SIMPSON

is the name of the men who grow the finest

CHERRY

that can be produced by suitable soil, climate and
 expert knowledge.

Take a look at the stock or ask for a sample and
 be convinced of the extra quality of their

TREES

PEACH

ST. PEAR

APPLE—1 year, 2 year and 3 year
 AMERICANA PLUM ON PLUM
 COMPASS CHERRY ON PLUM

H.M. Simpson & Sons

VINCENNES, INDIANA

For Winter and Spring Orders

**WE OFFER THE FOLLOWING FROM
 OUR MAC CLENNEY NURSERY . . .**

- 4000 **Mulberries**, mostly of Hicks variety, smooth and free
 from blight.
- 15000 **Figs**, mostly of the Celeste and Lemon varieties.
- 20000 **Peach**, in 2 to 3 ft., 3 to 4 ft. and 4 to 5 ft. sizes.
- 25000 **Plum on Plum**, Abundance, Burbank, Wickson, Red
 June, Gonzalez, and other leading sorts. Sizes $\frac{1}{2}$, $\frac{5}{8}$,
 $\frac{3}{4}$ and 1 inch.
- 10000 **Roses**, Teas, Hybrid Teas and Climbers, all grafted very
 low on Manetti roots. Field grown.
- 6000 **Biota Aurea Nana**, sizes 18 inches up.
- 10000 **Biotas and other Conifers**, 12 inches and up. Conifers
 can be balled or shipped with naked roots.
- 25000 **Chinese Arborvitae Seedlings**, 2 and 3 year, 6 inch to
 3 ft. sizes.
- 5000 **Muscadine Grapes**.
- 20000 **Trellis Varieties Grapes**.
- 70000 **Camphor Trees**, sizes 1 to 3 ft.
- 3000 **Pot Grown Eucalyptus**, sizes 3 to 5 ft.
- 4000 **Oriental Plane**, sizes from 4 to 12 feet.
- 3000 **Texas Umbrella**, sizes from 4 to 8 feet.
- 2000 **Oleander**. Field grown. 3 to 5 ft. sizes.

A general variety of Orange and Grape Fruit Trees.
 Could also supply limited quantities of general list of Fruit
 and Ornamental Trees to be used to fill in with orders.

Stock is fine and will be sold at Right Prices.

The Griffing Brothers Company
 JACKSONVILLE, FLORIDA

NURSERYMEN AND FLORISTS

looking for stock can find largest assortment in the United States at the

Painesville Nurseries

Fruit and Nut Trees, Deciduous Trees, Shrubs and Evergreens, Hardy Roses,
Vines and Plants, Grapes, Gooseberries, Small Fruits, Bulbs, Seeds,
Palms and other tender Greenhouse Plants

Have large stock stored in frost-proof cellars that can be shipped at any time desired; switch from N. Y. C. lines direct into our packing house; can load without exposure. Unsurpassed facilities for handling orders large or small.

== CATALOGS AND PRICE LISTS FREE ==



AMERICAN ELM

A FEW SPECIALS WHILE THEY LAST :

STANDARD PEARS in assortment, DUCHESSE DWARF PEARS, BOURGEAT QUINCE,
PRUNUS PISSARDI and TRILOBA, CUTHBERT and other Raspberries,
CONCORD and other GRAPES

OUR SPECIALTIES ARE

Roses, H. P. Moss, Ramblers, Climbers, etc., Peaches, Pears, Plums, Cherries,
Ornamental Trees and Shrubs in car lots, Weeping Mulberries, Elm and Ash,
Clematis, Ampelopsis, Paeonies, Hydrangeas, Bush and Tree Perennial Plants.

No Trouble to Price your List of Wants. 55 Years 1200 Acres 44 Greenhouses

THE STORRS & HARRISON CO.

PAINESVILLE, OHIO

FOR FALL, 1912

AMERICAN

ELMS...

Norway Maples

SPLENDID TREES

Ellwanger & Barry

MOUNT HOPE NURSERIES

ROCHESTER, N. Y.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of
Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
PYRAMIDAL and STANDARD
TREE BOX, 3 to 6 feet

Write for our Special Prices

Special Attention given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

63 Years

700 Acres

TREE LILACS

Grown as STANDARDS with strong, straight stems and well-branched, well-balanced tops; forty varieties, single and double, all shades from purest white to darkest purple. A profitable *specialty* for agency and catalog houses.

J. & P. Tree Hydrangeas were the first home-grown standards on the market. Our **Tree Lilacs** are becoming even *more* popular.

Electros free for use in advertising. Special prices to large buyers of TREE LILACS.

Other shrubs also grown as STANDARDS, like **Snowballs**, **Weigelias**, **Spireas**, **Forsythias**—very special stuff for high-class retail trade. We, ourselves, sell at wholesale only and to nurserymen and florists exclusively.

Jackson & Perkins Company

Growers of the J. & P. Specialties

Sold to the Trade only

NEWARK, NEW YORK

Berckmans' Specimens

We never call a tree or plant a "specimen" until it really has earned the title. Our evergreens are transplanted, sheared and root-pruned, each one getting just the proper attention to make it a really handsome and serviceable specimen. It *costs* more to produce such, but it's *worth* it—to us, to you and to your customers.

Your Trade Will Be Pleased With Them

We offer a select but limited stock at wholesale this year. We call attention to our Biotas—**Aurea Nana**, **Aurea Conspicua**, and **Japonica Filiformis** (see illustration); **Retinospora**, **Thuya**, and **Juniper**—all in popular sizes for the trade.

Our Deciduous Shrubs include **Exochorda**, **Lilac**, **Spirea**, **Althaea**, **Deutzia**, **Philadelphus**, and a very choice stock of **Teas' Weeping Mulberry**.

Broad-leaved Evergreens—**Azalea Indica** (Home-grown Plants) **Magnolia Fuscata**, **Aucuba**, **Ligustrum**, and **English Laurel**. Among our fruits, we direct particular attention to our clean, thrifty **Peach Trees**, of which we offer the the leading sorts.

WRITE FOR PARTICULARS NOW

Tell us what you need, quantity, etc., and we will quote lowest price possible. Write early and get the best selections from our stock.

P. J. Berckmans Co.
INCORPORATED

Fruitland Nurseries
AUGUSTA, GEORGIA

Established 1856. Over 450 acres in
Nursery.

CONIFERS
BROAD-LEAVED
EVERGREENS
DECIDUOUS
SHRUBS
WEEPING
MULBERRY
PEACHES
OTHER FRUITS



Biota Japonica Filiformis.

When writing to Advertisers please mention The National Nurseryman.

The Best Tree Digger on Earth



Used and Recommended by Leading
Nurserymen.

The one we have used for years and by far the most satisfactory of any we have ever seen. It does exactly the work for which it was designed and does it right. If interested we will be glad to send description and prices.

Stark Bros. Nursery & Orchards Co.

LOUISIANA, MO.

Big enterprises often grow from small beginnings, and profitable nursery departments can frequently be developed from a modest start.

For instance—have you noticed lately what a lot of interest your customers are taking in Evergreens? More evergreens are being grown and sold this year than ever—being used for hedges, windbreaks, timber plantings, etc. You can pull *your* share of that trade if you start with

Hill's Seedling Evergreens

We grow them uncommonly well because we give practically all our attention to them. We have been at it over a half-century. We produce evergreen seedlings by the million.

It will pay you to plant liberally of them, and you will find our prices and terms are right. Write for particulars and Wholesale Catalog.

THE D. HILL NURSERY CO., Inc.

Evergreen Specialists

D. HILL, President Box 401, Dundee Illinois

L. Spaeth **BERLIN**
Baumschulenweg
GERMANY

Largest Nurseries in Europe

2000 ACRES

FOUNDED 1720

HARDY TREES AND SHRUBS

1. Our nurseries lie in a colder climate than the French, Dutch and English nurseries—
2. We grow all the stock we sell—
3. Moderate prices.
Catalogs free—
4. When in Europe come and see our nurseries—

Willis Nurseries

OFFER A GENERAL ASSORTMENT
OF NURSERY STOCK

Apple, Peach
Red Dutch Currants
Silver Maple Shade Trees
Catalpa Speciosa Seedlings
Apple Seedlings
Japan Pear Seedlings and
Oklahoma Peach Seed

A. Willis & Co.

OTTAWA, KANSAS

Heikes --- Huntsville --- Trees



Huntsville
Wholesale Nurseries

Huntsville, Ala.

JESSIE S. MOSS, Prop.

We offer for Fall of 1912 and Spring of 1913 in large quantities as usual:

SPECIALTIES

APPLES—Commercial varieties, one and two year, in large supply. As fine in quality as ever grown.

PEARS—Kieffers, one and two years old. A much smaller crop than heretofore.

CHERRIES—On Mazzard. Two year, Bing, Lambert, Napoleon, Black Tartarian.

CHERRIES—On Mahaleb. One and two years. Ea. Richmond, Dyehouse, Montmorency, Wragg, Royal Duke, in small supply.

PEACHES—We excel in Peaches, and of these we will have as fine a stock as we have ever grown, both in one year and June Buds.

ROSES—Budded. We will have a large and fine stock of leading Hybrid Perpetuals and Mosses grown at Huntsville.

PRIVET—Amoor River (South). Retains its foliage longer and holds its color better than California Privet.

PECAN SEEDLINGS—Huntsville grown from selected nuts collected along the Gulf Coast. Thin shell.

See Price List for Particulars.

Address, HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

EVERGREENS and CONIFERS,
in several hundred
kinds and varieties

ROSES, in all kinds
and varieties

RHODODENDRONS, Hardy,
ENGLISH HYBRIDS,
Maximum and Catawbiense

BOXWOOD, in all shapes,
forms and sizes

HARDY AZALEAS, in all
colors and varieties.

HEDGE PLANTS, in all
popular kinds

FLOWERING SHRUBS, in
bush and standard forms
in hundreds of kinds
and varieties

SHADE TREES, in hundreds
of useful and attractive
varieties

MAGNOLIAS and other
FLOWERING TREES

WEeping and STANDARD
TREES, in many varieties

JAPANESE MAPLES, in all
varieties and colors

HARDY TRAILING VINES
and CLIMBERS

HARDY VINES and CLIMBERS
in pots

SPRING and SUMMER
FLOWERING BULBS, ROOTS
and PLANTS

PALMS and BAY TREES by
the thousands

FRUIT TREES,
home-grown, imported,
DWARF and TRAINED

SMALL FRUITS, in all
kinds and varieties

NUT TREES, profitable
kinds

OLD-FASHIONED, Hardy
FLOWERING PLANTS, in
thousands of kinds and
varieties

PAEONIAS, IRIS, PHLOX
FERNS,
and HARDY GRASSES

KITCHEN
HERBS and ROOTS

RUTHERFORD PARK LAWN
GRASS SEED

AUTUMN BULBS, Dutch,
French and Japanese kinds

Interior and Exterior
DECORATIVE PLANTS, in
a large variety

PLANT TUBS, in all shapes and
sizes. Ask for special list

VISITORS to our nurseries
are always welcome

SEND IN YOUR LISTS FOR
QUOTATIONS

Nurserymen, Florists and Planters
RUTHERFORD, N. J.

Fruit Seeds and Seedlings

WE offer a complete list of FRUIT SEEDS AND SEEDLINGS this year. Send for a copy of our list showing varieties, sizes and prices.

Tree and Shrub Seeds

Send for our complete price list of DECIDUOUS AND EVERGREEN TREE AND SHRUB SEEDS. It contains a full list of varieties and prices.

Small Stock for Lining Out

Our Price List of Small Stock for lining out in nursery rows will be ready about JANUARY 1st. This list will interest every Nurseryman. Be sure and get a copy.

THOMAS MEEHAN & SONS

WHOLESALE NURSERYMEN AND SEEDSMEN

DRESHER, P. A.

BRIDGEPORT NURSERIES

OFFER A GENERAL ASSORTMENT
OF NURSERY STOCK

Apple, Catalpa Speciosa Seedlings

Shade and Ornamental Trees

IN LARGE QUANTITY

WRITE FOR PRICES

C. M. HOBBS & SONS

BRIDGEPORT, IND.

California Privet

Over a million plants in one and two year old grades

Berberis Thunbergii

To meet the fast increasing demand for this popular hedge plant we have been growing a very large supply.

BERBERIS THUNBERGII SEEDLINGS

Plant for Profit

Sure Money-Maker

Our General Line of Nursery Stock is most complete, including Fruits of all kinds, Evergreens, Shrubs, Etc.

FALL TRADE LIST IS NOW OUT. IF YOU HAVEN'T A COPY SEND FOR ONE

C. R. BURR & CO.

Growers of Fine Nursery Stock MANCHESTER, CONN.

FOREST TREES FRUIT STOCKS

Shipments of over 200 Million of Trees Annually

♦ ♦

J. HEINS' SONS

HALSTENBEK, No. 152

Near Hamburg, Germany

Largest Forest Tree Nurseries in Europe.

Please write for Catalogue and Forest Planter's Guide to our American Agent:

OTTO HEINECKEN

Whitehall Bldg., 17 Battery Place
NEW YORK CITY

PROTECT YOUR PRODUCTS

SCALINE will do it for you at all seasons of the year.

SCALINE is an oil and sulphur composition, a scalicide insecticide and fungicide, three in one, which will destroy San José, oyster shell, cottony maple and tulip scale, aphids, red spider and thrips.

SCALINE is composed of a high grade petroleum oil and the properties of our fungicide Fungine, making it equally effective for the control of various fungi.

SCALINE is used at the strength of one to twenty for scale; one to fifty for other sap sucking insects. It is readily soluble in water and containing no sediment, can be applied through the finest spray nozzle.

SCALINE may be as safely used on plants in the growing as in the dormant season.

Gallon, \$1.50 Ten gallons, \$10.00

Fifty gallons, \$37.50

VERMINE will destroy all soil vermin such as cut, wire, eel and grub worms, maggots, root lice and ants and does it effectively without injury to vegetation. Used at the strength of one part to four hundred parts water, thoroughly soaking the ground it will protect your trees and crops from the ravages under the soil.

Gallon, \$3.00. Five gallons, \$6.25.

Ten gallons, \$22.50

Aphine Manufacturing Company

Manufacturers of Agricultural Chemicals

MADISON, N. J.

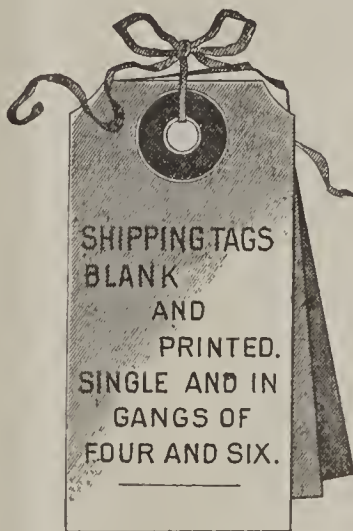
"APHINE"—Insecticide.

"FUNGINE"—Fungicide

Have you seen and examined the quality and finish of our

Rawhide Brand of Shipping Tags and Tree Labels

printed or plain, strung or wired?



This stock is especially adapted to the most severe usage, being thoroughly waterproof & weather-proof. "Once used, always used."

Send for samples and prices. Our reference are the largest nursery men in the United States.

The Denney Tag Co.

WEST CHESTER, PENNSYLVANIA

35TH YEAR
Pan Handle Nurseries

WE OFFER A COMPLETE ASSORTMENT OF NURSERY STOCK CONSISTING OF

Apple	Poplar Carolina	Ampelopsis
Pear	Poplar Volga	Roses
Plum	Elm American	Evergreens
Cherry	Sycamores	California Privet
Peach	Mountain Ash	Buxus
Grape	Althea	Weeping Trees
Currant	Hydrangea	Catalpa Seedlings
Gooseberry	Barberries	Black Locust "
Small Fruits	Syringae	Fruit Tree "
Maple Norway	Clematis	Catalpa Speciosa Seed.
Maple Schwedlers	Honey Suckle	Etc., Etc., Etc.
Maple Silver	Wistaria	

Our stock is well grown and graded. Prices are such that it will pay to investigate. Come and see us or write.

J. K. HENBY & SON
GREENFIELD, IND.

APPLE TREES

We can supply in carload lots or less, in one or two-year-old, the following in strictly No. 1 Grade:

Ark. Blacks	Newtown
Baldwin	Ortley
Delicious	Spitzenburg
Gravenstein	Wagner

We also supply scions in the above variety for early shipment.

ALSO PRIVET IN QUANTITY.

Ideal Fruit and Nursery Co.
HOOD RIVER, OREGON

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction.

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

Ornamental Trees, Shrubs, Evergreens, Vines, Etc.

HIGH
GRADE



LARGE
VARIETY

Correspondence solicited. Price list upon request.

W. B. WHITTIER & CO.
South Framingham, Mass.

WE OFFER FOR FALL, 1912,

Peach Trees in car lots

NORWAY MAPLE CALIFORNIA PRIVET,
SILVER MAPLE 1 year

325,000 APPLE, 1 year, grafts and buds,
in COMMERCIAL VARIETIES

The Greenbrier Nursery Co., Inc.
Greenbrier, Tenn.

SCARFF'S PLANTS

equal to any
on the market

Small Fruit Plants our specialty for 25 years. 100,000 Transplanted Raspberry, Blackberry and Dewberry plants, fine for critical retail trade.

Currant, Gooseberries, Grapes, Horseradish, Asparagus, Rhubarb, etc. Hardwood cuttings and layers in large quantities. See our wholesale list before placing your order.

W. N. SCARFF

NEW CARLISLE, OHIO

FOREST TREES

SEEDLINGS AND TRANSPLANTS

in quantities for retimbering or lining out; healthy stocks, from the very extensive and well kept Wholesale Nurseries of

H. H. PEIN, Halstenbek, Germany

for latest trade list and all other inquiries address our sole American agents:

August Rölker & Sons
P. O. Box 752, or
31 Barclay Street
New York



Small Fruit Plants for the Nursery Trade, Fall 1912

Blackberry Rootcutting Plants, Eldorado, Erie, Ohmer, Rathbun. Raspberry, all leading varieties. Houghton Gooseberry Plants. Two hundred thousand Gooseberry Layer Plants. Asparagus, one, two and three year roots. One hundred thousand Rhubarb, one and two year roots, also divided. Horseradish Sets, etc. Write for Price List. P. O. BERRY, Dayton, Ohio

WE ARE GROWING FOR THE SEASON

1912-13

1,000,000 American Sycamore,

6 in. to 3 ft.

1,000,000 Green Ash,

6 in. to 3 ft.

500,000 California Privet,

6 in. to 3 ft.

Also a large stock Alianthus, Box Elder, Catalpa Speciosa, Black Locust, Red Bud, American White and Cork Elm, Tulip Poplar, Sweet Gum, Carolina, Lombardy and Silver Poplars, R. Mulberry, Althea (both seedlings named varieties), Berberry, Calicanthus, Deutzia, Hamamelis Virginica, Spireas in varieties, Weigelias, Yucca, Maples, Chinese Wistarias and a large variety of other stock. Send for Trade List.

Also Tree and Shrub Seeds.

Forest Nursery and Seed Co.

McMinnville, Tenn.

Seedling and Transplanted

Evergreens by the million

Arbor Vitae

Austrian Pine

Black Hill Spruce

Colo. Blue Spruce

Concolor

Engelmanii Spruce

Jack Pine

Norway Spruce

Pinus Ponderosa

Scotch Pine

White Pine

White Spruce

We have these in all sizes and ages. Also a general line of nursery stock.

Evergreen price list now ready.

**SHERMAN
NURSERY COMPANY**

CHARLES CITY, IOWA

Cyclopedia of American Horticulture

L. H. BAILEY

IN FOUR VOLUMES

The NATIONAL NURSERYMAN has made special arrangements with the publishers of this great work and now offers it to Nurserymen on *special easy monthly terms*, \$2.00 per month for ten months. The work shipped by express prepaid on receipt of first installment and coupon below filled out.

Practical instructions on every subject connected with Horticulture. Four handsome quarto volumes; 2,800 original engravings, 50 full plates; 2,016 pages and 4,357 articles; Total plants accounted for 24,434.

Fill out this coupon and mail with first payment:

SPECIAL ORDER BLANK.

Date.....

National Nurseryman,
Rochester, N. Y.

Please enter my name as a subscriber for the new CYCLOPEDIA OF AMERICAN HORTICULTURE to be sent to me, charges prepaid, complete in four illustrated volumes, bound in green cloth. I inclose \$2 and agree to pay \$2 monthly for nine months after delivery until \$20 is paid.

Signature.....

Address.....

Town..... State.....

Reference.....

NOTE:—Send Money by Check or Post Office Money Order.

THE NATIONAL NURSERYMAN

218 Livingston Building

Rochester, N. Y.

Franklin Davis Nursery Co.

BALTIMORE, MD.

WE OFFER FOR FALL 1912

APPLE—I and 2 year.

PEACH—Will have a nice lot of smooth trees in good assortment of varieties.

CHERRY—I and 2 year.

PEAR—I and 2 year.

ASPARAGUS—I and 2 year.

CALIFORNIA PRIVET—I, 2 and 3 year, or carload lots—fine, bushy plants.

ORIENTAL PLANES, CAROLINA POPLARS, NORWAY MAPLES, SILVER MAPLES.

AMERICAN ELMS and a general assortment of ornamental stock.

SEND IN A LIST OF YOUR WANTS

WANTS.

We want small Evergreens and Shrubs for transplanting—What can you offer?



CATALPA SPECIOSA SEEDLINGS -

DO YOU WANT THE BEST APPLE SEEDLINGS

Your money can buy? We can furnish them. We have been growing Apple Seedlings for twenty-eight years and think we know what it takes to make good Apple Seedlings. We find that one important part of the business is often overlooked. That is, to keep the foliage in a healthy condition. Seedlings with foliage damaged either by insects or fungus diseases cannot have a strong and vigorous root. Their vitality is weakened and they make poor budding or grafting stock. Our seedlings have been sprayed throughout the entire growing season and the foliage is in perfect condition, insuring perfect root development. Grading and sorting will be done by experienced workmen, under our personal supervision. Ask for sample of seedling. We shall be glad to send it by mail or prepaid express. Apple Seedlings are very reasonable in price this season. Why not grow a block of budded apple? A few scions placed in cold storage will give you cheap buds for next summer's work.

JAPAN PEAR SEEDLINGS

CATALPA SPECIOSA

We gather our own Catalpa seed and know them to be genuine Speciosa. Plants are grown on upland and are all well ripened and stocky. FRENCH PEAR SEEDLING, HOME GROWN.

GRAFTS

We are prepared to make Apple and Pear Grafts, whole or Piece, Root.

APPLE TREES, 1 and 2 years,
PEACH TREES, CHERRY TREES,
KIEFFER PEAR, 1 year

GOOSEBERRIES CURRANTS
SHADE TREES FLOWERING SHRUBS
FOREST TREE SEEDLINGS

J. H. SKINNER & CO.

NORTH TOPEKA, KANSAS



APPLE SEEDLINGS

The National Nurseryman

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated.

Vol. XX.

ROCHESTER, N. Y., DECEMBER, 1912

No. 12

GETTING ORDERS AND BUSINESS BUILDING

One of our subscribers writes as follows:

"Would like to see a discussion upon the subject 'How to get orders without agents expense of successful nurserymen.' This would be indeed an interesting subject."

It would be hard to imagine a subject of more vital interest to the Nurserymen or in fact any business man. While no statistics are available it is a pretty safe guess that it costs most business houses from 15 to 30 per cent to sell their goods or in the case of the landscape gardener their services. It matters very little whether the sales are made through agents, the mail or any other method. It is really a problem that every business man has to work out for himself, but there is no question that if the different nurserymen would give their experiences and opinions it would be of great mutual benefit.

A nurseryman's product is not a finished one, his goods have a potential value rather than a real one, he can seldom display his wares. He has to bring his customer to his nursery, which is usually away from the haunts of men, or he has the other alternative of showing pictures or giving word pictures either written or verbal describing his goods. He is further put in the disadvantage when catering to the retail trade of having to describe the possibilities of his stock rather than what it is. A rose bush in March at the time of planting is very different to the rose bush in June when it cannot be delivered.

There is no business calling for more faith on behalf of the customer and it naturally follows that there is no business calling for more integrity on behalf of the merchant.

It is not common for a man to enter the nursery business and by modern merchandising methods make a fortune, as is often done in other lines. It is rather a business that is built slowly by knowledge of the business, skill in growing, confidence begotten by honest saying and doing and an intelligence that takes advantage of every opportunity.

The fruit tree growers have the advantage over the growers of ornamental, to the extent that their products are standardized and commercialized and for which there is a well defined market in supplying the orchardist and fruit grower.

The ornamental grower has to create his own market, in fact, educate the public except for the help he receives from the Landscape Gardener, and this is a costly undertaking. The bi-annual catalogue, proficient salesman, mailing campaigns are all problems that require a great deal of thought. Many minds working on the same problem eventually bring a

solution. It may not be until the result of the experiments are recorded and the resulting knowledge systematized and organized until it becomes a science.

Here is where the hope of the nurseryman lies "By becoming a scientific salesman."

The word salesman is used in its broadest sense and includes the corporation or firms as well as the individual tree agent. The catalogue as well as the letter offering trees for sale.

How many when offering their goods do it scientifically, study the field of operation and make their offers accordingly? You cannot make a sale unless you attract the prospects attention. Will your catalogue, letter, salesman or advertisement do that? After attracting attention will they arouse an interest? A jokey advertisement may attract attention and arouse interest but not create the desire to buy. If they do all three is your equipment ready to clinch the order in such a way that both the buyer and seller profit?

An advertisement in the form of a business card may keep your name before the public but in these days of competition it requires more than that. You must convince the buyer that you have the stock he needs.

Perhaps many attribute low prices to the competition in the nursery business. Cut-throat competition is bad, but competition that forces the nurseryman to grow better stock, expand his market and give his customers the very best service is good and what a market the nurseryman has if he will collectively develop it. Every home in the United States with a yard 50 feet by 100 feet is a prospect for five dollars up and what is more the customer would be benefitted and the country benefitted by the purchase.

The real problem before the nurseryman is the development of the market for his goods. Although we may rail at the trusts and combines, it would be worth our while to emulate their methods in the development of a market. Take for instance the National Cash Register Co., their product is not a necessity as compared with bread and beef, but by salesmanship they proved to nearly every storekeeper in the land their products were needed and it is up to the nurseryman to prove to everyone who has a place to plant, that it needs planting. This is a large order but it will come with co-operation and good management.

Many nursery firms are doing more than their share in educating the public by expensive catalogues and literature and other forms of advertising, but they may feel grateful to know that every new planter is an advance in the welfare of the nursery business at large.

THE AMERICAN POMOLOGICAL SOCIETY

A Word to the Nurserymen

Mr. Editor:

In making a casual examination of the list of members of the American Pomological Society, we have been forcibly impressed with the fact that the nurserymen of the country covered by this splendid organization are not very intimately associated with it and in reality perform a very small part in its great public service. There is only one reason so far as I can see why this condition exists, namely, they are certainly not well advised as to its field of work, its influence and its great service to fruit-growing. No organization of this character can maintain itself in active working order for over half a century, simply by its own efforts, except it is serving devotedly and well some great public interest. That is just what the A. P. S. is doing. It has been, and is engaged in fostering, forwarding and fructifying both the latent and active fruit interests of this continent. It aims to aid materially in developing better fruit, better fruit-growing and better fruit-growers. Its splendid record of achievement during the past half century is ample proof that it has accomplished with a flattering degree of success the object for which it was organized.

During all this time it has indirectly done the nurseryman a great and lasting service by encouraging the public to plant and cultivate fruit, trees, shrubs, vines and plants.

Almost single handed it has brought about the use of a system of nomenclature that stands preeminent in the pomological world today. Through this society and the national government which is actively supplementing it, the nomenclature of our cultivated fruits is being systematized, simplified and purified. Scarcely a day passes that the society's committee on nomenclature and the government experts do not have some problem to settle concerning the synonyms, spelling, use or propriety of the names of our cultivated fruits. The society is becoming a clearing-house for all such matters in our continental pomological affairs.

This work, however, is only one feature of its activities. At present a large and active committee is at work upon a schedule of ratings for the leading commercial varieties of apples. Later it will take up the other fruits in the order of their importance. At the same time a vigorous effort to extend the use of the score-card in judging all competitive fruit displays is being made. Committees on new fruits, foreign fruits, inspecting and grading fruits, adaptability of varieties, and others are earnestly at work on the various problems in these several directions.

The ultimate benefit of the score-card work alone in bringing about a better appreciation of varietal merits, characteristics and values must be evident to all. While its significance as a factor in educating both the fruit growers and the public as to what constitutes a good specimen or package of fruit is almost beyond our comprehension. It requires a vast amount of labor to get results with subjects of this character when they cover such a tremendous territory.

Much, in fact, most of the labor is gratuitous, but there is considerable expense involved and this requires money. The only source of such "sinews of war" is the membership fees. It is true that the society has a small endowment but the funds from that are used to encourage the development of new fruits and allied matters. The income from two to three more substantial bequests could be used to excellent advantage in furthering the work that now lies before the society.

Under the conditions does it not appear that the efforts of this organization merits the active endorsement and financial support of the great nursery interests of the countries concerned? There is nothing incompatible between the objects of this society and the aims of any honest nursery firm. Note the list of nurseryman members. We know that nurserymen as a whole are liberal supporters of similar movements in behalf of progressive horticulture and pomology. Personally, I feel that their apparent apathy towards the American Pomological Society is due to lack of data on the subject, hence this brief article touching merely upon the surface of the society's work.

E. R. LAKE, Secretary.

NEW ASSOCIATIONS

About three months ago the Portland Floral Society was organized at Portland, with R. M. Bodlet, Secretary, and E. T. Miche, President. Mr. Miche is Superintendent of Parks in Portland.

The Idaho Association of Nurserymen was also organized in July with J. F. Littooy of Boise, Secretary and Charles T. Hawkes of Caldwell, President.

Last July the Oregon-Washington Association of Nurserymen was also formed with C. F. Breithaupt of Richland, Wash., President, and C. A. Tonneson, of Tacoma, Secretary.

ROOT-KNOT, CROWN-GALL AND HAIRY-ROOT IN NEW ZEALAND

We are informed by the Honorable Secretary of the New Zealand Association of Nurserymen, that the nurserymen in that far country are having their own troubles in connection with their Department of Agriculture legislation.

The Department has condemned nearly \$150,000 worth of fruit trees on account of their being infected with Root-Knot, Crown-Gall and Hairy-Root.

The nurserymen are protesting on the ground that the disease has not been proved, and even if it is proved in a percentage of cases they contend that the disease is not so serious as to warrant such extreme measures.

They write to the NATIONAL NURSERYMAN for the very latest reliable information on the subject to assist in contravening such drastic action and promise to let us know how they get on in the matter.

PROPAGATION OF HERBACEOUS PERENNIALS BY CUTTINGS

W. LAMB

Perennials, such as *Lavendula vera*, *Dianthus plumarius*, *Santolina incana*, *Iberis semperflorens superba* and similar plants of an evergreen nature, will readily grow from cuttings in winter.

A suitable bench in the greenhouse should be filled with clean sand and prepared for cuttings about the first of December. Wood for making cuttings can be taken from the plants named above and many others of like nature as required almost any time during the winter.

In case of a snowstorm, straw mats or burlap should be covered over the plants, the wood can then be obtained quickly free from snow or ice. During severe cold weather, the tops can be kept in better condition for making cuttings, if covered the same way.

Cutting wood, especially if frozen, should be given a drenching with water as soon as it is brought inside the shed, before they are made up. This takes all the frost out of them.

As the cuttings are made they should be put in water until ready for planting in the sand. Cuttings do best if put in the sand a short time after being made, not more than a couple hours. It is not a good policy to let cuttings stand in water over night and plant them next morning; plant them all the same day they are made up.

Make the rows one and one-half inches apart and the cuttings three-fourths to one inch in the rows. The sand should be pressed about the cuttings as firm as possible after planting, and then given a thorough watering with the can and rose.

Shade top cuttings with paper or muslin, removing shades at night. Shade should be put on a little later each morning and taken off earlier each evening until cuttings are strong enough to stand without shade.

Shade should not be used on dull days, except when the light is strong enough to make the cuttings droop.

The sand in the cutting bench should be soaked thoroughly with water, allowed to drain for a couple hours and then pounded firm and level before any cuttings are planted. Careful watering and ventilation will prevent many evils of the cutting bench.

To keep cuttings from drooping, a light sprinkle of water on top of the shades is better than directly on the cuttings. Water the cuttings when the sand begins to dry and give them plenty each time with the can and rose, so it will drain through to the bottom of the cutting bench.

When cuttings of perennials begin to grow at the top, usually they have made roots large enough to begin potting into two or two and one-half inch pots, the root growth should be from one-fourth to one-half inch at the time of potting.

Plants that are strictly herbaceous, whose tops die down to the ground cannot be propagated by cuttings, except from young shoots that spring from the base of the plant. When

it is desired to propagate such as *Phlox decussata* varieties, *Chrysanthemums*, *Veronica subserilis*, etc. The stock plants should be dug up and taken inside in early winter.

The first crop of cuttings will be ready to make up in January and others about every two weeks until the old plants are entirely used up for cuttings, what is left can be thrown on the rubbish heap. The first lot of cuttings will be strong little plants in two and one-half inch pots by April 1st, and all should be large enough for four inch pots by the end of May.

Root cuttings require the least care and are easy to make. Usually the roots, or in many cases the underground stems of the plants, are cut in two and one-half to three inch lengths and planted in the sand so the tops are about even with the surface. After watering, the cuttings should show about one-eighth inch above the sand.

When making root cuttings, care should be taken to keep the tops all one way so they can be put in the bench right end up. Root cuttings do not require shading like the top cuttings. Some plants grown this way are *Anemone Japonica* and varieties *Stokesia cyanea*, *Papaver orientale*, *Phlox decussata* and *Anchusa Italica*.

During late spring and summer, the greenhouse bench or a cold frame, covered with glass sash can be used for growing cuttings. The glass can be washed with mud and water on the inside to afford proper shade. Cuttings may be gathered from plants in the open ground, when they have grown large enough for this purpose.

PHILADELPHIA CITY TREES

The first thorough report ever made upon the condition of street shade trees in Philadelphia was presented to the Fairmount Park Commission yesterday by the special committee appointed last July to handle the conservation fund of \$10,000 appropriated by Councils.

Coupled with the report were the details of an extensive plan for the care and planting of street trees which will be carried out if Councils set aside a proposed fund of \$50,000. The report of the committee, of which Dr. J. William White is chairman, shows that fully 50,000 trees are in danger of destruction, and that during one month last summer seventy-nine dead trees were found on Broad Street alone.

Experts found almost all the trees in the streets in need of pruning and infected with destructive moths and worms. Corrective measures were instituted and are still being carried out. It is said the appropriation of \$50,000 proposed for 1913 would enable the commission to go over the entire field thoroughly. Space in the Fairmount Park tree nursery adequate for the propagation of 20,000 trees has been set aside for specimens suitable for street shade and already 7,000 maples, ash and ginkgo trees have been planted there for this purpose.—*The Evening Bulletin*.

FRUIT STOCKS

Questions are often asked concerning stocks, what they are, where they come from, why one stock is preferred to another. The following is a brief account of the various kinds used. Apples are very largely budded and grafted upon American grown seedlings which are raised in great quantities through the middle west from crab seed imported from France, although a large quantity of the stocks are also imported annually from France and lately Holland has begun to export them.

It is largely a matter of opinion as to whether the foreign or domestic are the best.

The imported stocks have branched roots and some claim make a more vigorous stock for budding.

The home grown stocks are not branched and are used more for grafting root. This is done in the winter, the grafted roots being kept in storage until spring when they are planted out in the field.

Paradise stocks are raised from layers and is entirely a French production. They are used for dwarfing the trees but are not very extensively used in this country.

Plums are mostly budded on the Myrobolan Plum stock, *Prunus cerasifera*. The seed comes from Italy and the stocks are grown in France and in the North-west.

There are two kinds of stock used for cherries, viz.: Mahaleb *Cerasus Mahaleb*, a dwarf growing wild cherry from South Europe, and Mazzard, a native wild cherry.

The Mahaleb stock is most generally used, though not largely on the Pacific Coast. The Mazzard is a stronger growing stock and is particularly adapted to the Pacific Coast, and is almost entirely used there. It is also used to some extent in the east, where it produces very strong trees, but can only be grown where constant spraying is practiced.

Pears to a large extent are budded on French Pear Stocks although some sorts do well on Japanese and Kieffer Pear stocks, both of which are grown in America. Of late years the Frenchman are also growing and exporting the Japanese and Kieffer stocks. The majority of the American stocks are grown in Oregon, Washington and British Columbia, though some smaller lots are grown in Iowa and Kansas.

Quince stocks are used for dwarfing and largely come from France.

ANSWERS TO CORRESPONDENTS

Can you tell us of a machine or process for getting out Osage Orange Seed for early fall delivery or tell how to construct one? We want to get several hundred pounds and want it before it will have time to freeze and soften the balls.

G. Y.

We do not know of any such machine, nor do we think there is one. The only method we know of for cleaning the seed from the balls is to let the balls lay out of doors all winter and the action of the frost will finally rot them, when the seed can be easily extracted by washing the rotten pulp in water.

Where seed is wanted in the Fall, it is usually the better plan to use the one year old seed as such seed is perfectly good and full of germinating power and a good stand of seedlings can be raised from it.

BUSINESS DRESS

It is not the purpose of this article to discuss the proper dress of the nurseryman or his representative when he meets customers whether it be business suit mornings, Prince Albert afternoon and full dress after 6 P. M.; taking it for granted that either will have sufficient pride to make a good appearance.

Nurserymen seldom see their patrons, and in the large mail order houses the majority of customers are never seen; therefore, that which goes forth from the establishment must have good business dress so as to impress the patron or would be patron with the stability and scope of the concern.

If you would attract trade through advertising, the "ad" should be truly representative of the business, not slipshod, thrown together meaningless phrases but properly dressed to impress the would-be buyer.

The inquirer is another who must be properly impressed by the dress of the communications he receives. The catalogue or other literature to be sent while not necessarily appearing expensive or overdone should bear the earmarks of knowledge, fitness and good taste both as to material and workmanship even to the envelope and the address written thereon. The form letter or other communication must have the appearance of being original and not a sloppy, besmirched, uneven dark and light mimeograph copy, poorly put together on a letter head that looks as though it came out of the "ark." The letter paper should be good and the printing or engraving thereon neat and tastefully arranged but nothing extremely expensive.

The best form letters for appearance are filled in imitation typewritten or better still original typewritten and contain a genial greeting and introduction to the house together with a good selling vein. Rather than a poor imitation letter use a neatly printed announcement. The envelope enclosing the letter should be in accord therewith.

Bills, circulars, tags, labels, post cards, etc., emanating from the establishment should show individuality, good taste and care in dress impressing the customer that his order is in the hands of a concern being careful in every detail to render efficient service and that he may expect his purchases, inquiries and direction to have individual and careful attention.

The small business that is a one man concern can also profit by putting its attention on care, neatness, etc., in everything going to its customers thus showing the individuality of the proprietor in every communication or transaction. Let the dress be simple and plain but good.

First impressions are lasting, therefore, meet your unseen customer in your best style just as you would send out your very best stock on an order in which your reputation was at stake. Do not endeavor to make a small business appear large but make it individual. With a large concern let every thing going out from the establishment impress with scope, stability and facility.

The public judges largely by appearances, so let the dress of your various silent representatives impress all favorably and then after making the good impression back it up by the best of service that all may be in keeping.

GEORGE W. OTTINGER.

Obituary

GEORGE A. SWEET DIES AT DANSVILLE

DANSVILLE, Nov. 14—George A. Sweet, one of Dansville's foremost citizens, died last evening at his home in lower Main street. Mr. Sweet was born in Cumminsville, a suburb of this town, August 26, 1844. He was a son of Sidney Sweet, who established a bank here in 1849. George A. Sweet was educated at the Dansville Seminary and later was graduated from Lima Seminary. He then entered his father's bank. In 1864 he went to New York and for a few years served as teller in the Ninth National Bank. While in the city he contracted the illness which finally resulted in death. In 1867 Mr. Sweet went to Vineland, N. J., and for a short time engaged in the fruit business. He returned to Dansville in 1869 and engaged in the nursery business, and from that time until death conducted a large wholesale and retail establishment, his son, Maxwell Sweet, becoming associated with him during the latter years of his life.

When the Citizens Bank of Dansville was organized in 1887, Mr. Sweet was chosen president and held that office until death. Mr. Sweet served his town as supervisor and the village as president, and was the unsuccessful nominee for congressman and assemblyman. Mr. Sweet served two years as president of the National Nurserymen's Association, was president of the Dansville Nursery Association and was prominently identified with the two National Protective Associations for Nurserymen. He was president of Greenmount Cemetery Association, charter member of Union Hose Company and honorary member of the club room association. He was vice-president of the Dansville Improvement Society, vestryman of St. Peter's Episcopal Church and filled different offices in the Odd Fellows.

Although for the past year Mr. Sweet has been confined to his bed most of the time and was gradually growing weaker, he gave supervision to his affairs and counsel to all who sought his advice. Mr. Sweet was one of the oldest and most experienced nurserymen in business here. The Citizens Bank is to meet this afternoon to take action on his death, and all organizations to which he belonged will attend the funeral, which will be held from the family homestead Saturday afternoon at 2:30, Rev. Mr. Hakes, of St. Peter's Church, officiating.

Mr. Sweet leaves his wife, two children, Maxwell Sweet of this village, and Mrs. Benjamin Readshaw of Oakland, California; one brother, Hon. Edwin F. Sweet, of Grand Rapids, Mich., all of whom will be present at the funeral.—*Democrat & Chronicle*.

DEATH OF JOSHUA I. MAXWELL

Joshua I. Maxwell, of Geneva, N. Y., one of the founders of the nursery industry that has made his community famous,

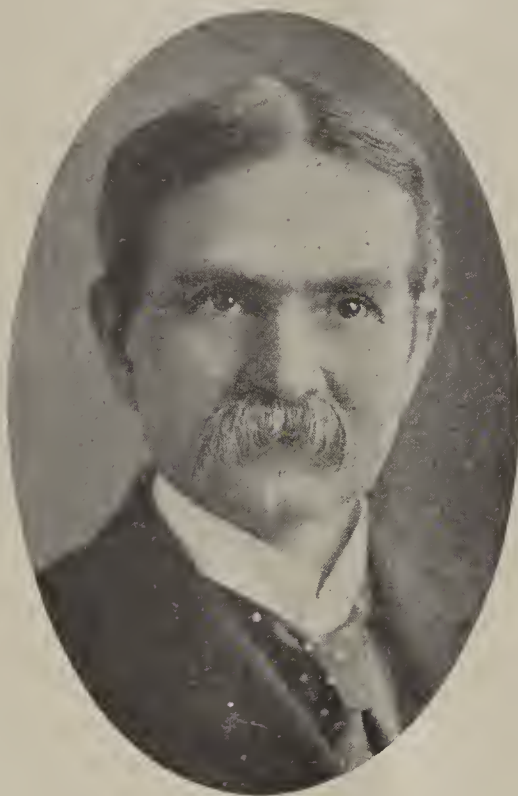
died October 23 at the age of 88. Mr. Maxwell entered the nursery business in 1852 with his brother, who had begun four years earlier. There were but two nursery firms in Geneva at the time and the plantings of the two did not exceed ten acres. When the Maxwells retired in the eighties they were planting more than 1,000 acres. Mr. Maxwell was interested in many business enterprises in his home town and donated large sums to charity.—*American Florist*.

JOHN C. CHASE

The death of Benjamin Chase, whose obituary notice appeared in our last issue, has given rise to the impression among certain nurserymen throughout the country that it was John C. Chase who always attended the meetings of the American Association of Nurserymen who died.

Benj. Chase was the senior member of the firm of the Benj. Chase Co.

John C. Chase is still alive, in good health and we trust may be with us for many years to come.



GEORGE A. SWEET

SAD DEATH OF PLINY W. REASONER, II

We have just received a communication from Mr. R. T. Wedding telling of the sad death of Mr. Pliny W. Reasoner, II, who was accidentally killed while hunting.

He and his elder brother, Norman, together with several friends, were on a hunting expedition near Miakha, about twenty-five miles east of Oneco. Shortly after luncheon they were preparing to go to a little creek, near their camp. Mr. Reasoner attempted to pick up his gun and in some manner it fell from his hand resulting in its being discharged, inflicting a fatal

wound in the left side. He lived but a few minutes.

Mr. Pliny W. Reasoner was very actively connected with the Royal Palm Nurseries. The NATIONAL NURSERYMAN extends sincere sympathy to his family and friends.

CHAIRMAN EXHIBITION COMMITTEE

The Exhibition Committee of the American Association of Nurserymen has developed into a very important one during the past few years. President Thomas B. Meehan has held the appointment of a Chairman under advisement for sometime, being desirous of selecting a man on the coast who would develop this important matter. He has just appointed F. W. Power, of the Oregon Nursery Co., Orenco, Oregon, as Chairman of this Committee and this appointment justifies the belief that the exhibition will be one of the best we have had in recent years.

MONROE, Mich.—The Mutual Nurseries Co., of this place has filed articles of incorporation at the state capital. The capital is placed at \$50,000.—*American Florist*.

Your favor of recent date received. Enclosed find \$1.00 for the renewal of subscription to the NATIONAL NURSERYMAN. I never have missed a copy since the paper was started. ELMER SHERWOOD.

The National Nurseryman

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President and Business Manager..... THOMAS B. MEEHAN
Editor..... ERNEST HEMMING
Secretary-Treasurer.....

The only trade journal issued for Growers and Dealers in Nursery Stocks of all kinds.
It circulates throughout the United States, Canada and Europe.

Official Journal of American Association of Nurserymen

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One year, in advance.....	\$1.00
Six months.....	.75
Foreign Subscriptions, in advance.....	1.50
Six months.....	1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Rochester, N. Y.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Address, Editor, Flourtown, Pa.

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Sworn to and subscribed before me this 28th day of September, 1912.

[SEAL] A. Rothwell Meehan, Notary Public.

(My commission expires Jan. 16, 1915).

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American Nurserymen's Protective Association—President, J. W. Hill, Des Moines, Ia.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, Charles J. Brown, Rochester, N. Y.; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association of Oklahoma Nurserymen—President, J. A. Lopeman, Enid, Oklahoma; secretary, C. E. Garee, Noble, Oklahoma.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President W. W. McCartney, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Eastern Association of Nurserymen—President, Wm. C. Barry, Rochester, N. Y.; secretary-treasurer, William Pitkin, Rochester, N. Y. Meets annually in January.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

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Pacific Coast Association of Nurserymen—President, P. A. Dix, Roy, Utah; secretary-treasurer, C. F. Tonneson, Tacoma, Wash. Meets annually in June.

Pennsylvania Nurserymen's Association—President, Abner Hoopes, West Chester, Pa.; secretary,

Southern Nurserymen's Association—President, W. A. Easterly, Cleveland, Tenn.; secretary-treasurer, A. I. Smith, Knoxville, Tenn.

Tennessee Nurserymen's Association—President, E. W. Chatten, Winchester, Tenn.; secretary, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, J. R. Mayhew, Waxahachie, Texas; secretary-treasurer, John S. Kerr, Sherman, Texas.

Western Association of Nurserymen—President, Geo. A. Marshall, Arlington, Nebr.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

The California Association of Nurserymen—President, W. V. Eberly, Niles, Cal.; Secretary, H. W. Kruckeberg, Los Angeles, Cal.

THE NURSERY BUSINESS

The nursery business in the United States is going through a process of evolution that is exceedingly trying to those engaged in it. What with Federal Quarantine Laws, State Inspection Laws, Permits and Licenses governing inter-state business, the path of the nurseryman is not strewn with roses and he sometimes doubts if he is in the land of the free and the home of the brave. In his dreams he is apt to see the government taking his business away from him by the aid of the law and giving it to the Department of Agriculture and Horticulture, State Forestry schools and Farms, etc.

The one consolation he can take out of it is, that it proves his business is one of vital importance to the welfare of the country.

He would rest easy if he could only prove to the public and incidentally to the Department of Agriculture that nurseries are really the places that are freest from plant diseases and insect pest and have least to do with the spreading of either, but great truths are too simple to be understood. He prays for the time when the scientists and theorists will begin to recognize that correct cultivation is as good a preventative against disease among plants as right living is among the human race. The human race still exists in spite of epidemics previous to the science of medicine and so will the chestnut tree in spite of the blight, and other vegetation in spite of the gypsy and brown tail moth or until it has completed its cycle of existence and has been replaced by types more resistant to present conditions.

Patience, patience, patience and then more patience is what the nurseryman must cultivate because in time the scientific theorist will become practical and the legislature will be composed of practical men that will make laws that are of real benefit not experimental ones that are so oppressive to the nurseryman.

TRAINED HELP

The greatest need in the nursery business in America is for skilled or trained help. What nurseryman has not felt and is continually feeling the full force of this statement. Laborers are sometimes scarce and more often very poor quality, but methods, machinery and brains can to a certain extent be made to substitute for the shortage. In the growing of plants, knowing how, when and what to do at all times and under all circumstances requires trained judgment. Men that know plants practically as well as theoretically. Men who studied with a spade in their hands as well as in the class room. Men who the moment they set eyes on a block of trees know what ought to be done to them and know how to do it, and the more able they are to teach others and guide them in their work the more valuable and scarce they are.

The nursery business has assumed such proportions in America, that a defined effort should be made to encourage young men to follow the nursery business as a profession.

A young man with brains and ambition enough to become a good nurseryman is just as able to become a doctor, lawyer or any of the other professions or trades. So there must be some inducement.

The two essentials are wages and a recognized position or standing.

The first solves itself with all commercial houses as a man should be paid according to the value he produces. This should be promptly recognized by the employer and every encouragement given.

The second is largely one of sentiment but never the less real. A soldier sacrifices his life for it, and a man with ambition works for something else besides the dollar. Give the skilled nursery worker a recognized standing in the trade that is not actually bounded by the limits of the nursery where he is employed.

THE PHILADELPHIA CHRYSANTHEMUM SHOW The Philadelphia Chrysanthemum Show held at the Horticultural Hall, Broad and Locust, under the auspices of the Pennsylvania Horticultural Society was in many ways superior to any previous exhibition in this city.

On the whole it showed marked improvement over preceding years.

Most attractive and splendidly done were the general decorations and general arrangements, executed under the direct supervision of William Graham of the Habermehl establishment.

The great improvement in this alone show that better results are obtained by placing the work in the hands of a specialist instead of leaving it with a committee however well formed it may be.

The private gardeners were in strong force with their exhibits and deserved much praise for the floricultural triumphs they displayed in large specimen plants and cut blooms of Chrysanthemums.

The display of orchids from a number of sources was unusually good. An Orchid picture from Joseph Heacock, Wyncote, Penna., composed of *Cattleya* and *Oncidium* gracefully and artistically arranged with ferns in a massive gilt frame caused a sensation and was a feature to be remembered.

The seedsmen were represented by the houses of Dreer, Michell, Waterer and Burpee.

Nurserymen were not so much in evidence. The William H. Moon Co., displayed groups of evergreens distinctly classified in their several genera.

Thomas Meehan & Sons arranged an attractive exhibit of Hardy Chrysanthemums backed by a number of rare evergreens among which stood out very conspicuously well berried specimens of English Holly. In addition to the above group they had an exhibition of Twenty competitive paintings of their *Mallow Marvels*.

The winner of the first prize, \$100.00 was a picture sent from Ohio and was very cleverly done, being botanically correct as well as very artistic.

EDWIN MATTHEWS.

Most nurseries are away from the passing crowds. Advertise or buyers will not know you are in the business.

Buyers need not be afraid to deal with advertisers in the NATIONAL NURSERYMAN. All are of good business standing.

THE PANAMA-CALIFORNIAN EXPOSITION

Already visitors to the Exposition grounds are confronted with part of this splendid exhibit, which is being put in place by the southern counties of the State of California. Around the site of the building for the southern counties, work on which is now progressing, can be seen the main exhibit which will consist of an orchard of 800 trees embracing seventeen varieties of citrus fruits—oranges, lemons, grapefruit, and other varieties which form one of the principle products of California.

Strangers to the region beyond the Rockies where eternal spring holds sway find in the orange groves one of the most fascinating features of the country. The glossy green of the foliage, the wax-like blossoms dedicated by immemorial tradition to bridal festivals, golden fruit the like of which never was seen in the gardens of the Hesperides, all charm the eye and entrance the beholder. To produce on the Exposition grounds a model grove of this kind was a happy thought and that it will be an attraction of prime importance cannot be doubted.

California will endeavor to convince the most skeptical visitor that its oranges and lemons and even its grapefruit, are superior to any that can be grown elsewhere. Some have thought that because few grapefruit have been seen in the markets from California, that State could not cope with the fine fruit grown in Florida, but Mr. A. D. Shamel, the Government expert engaged in standardization tests in California, declares that he has never seen finer grapefruit than grows in the southern counties, where he has been laboring. With the other citrus fruits, including the celebrated navel orange, California is now sending to market something like 50,000 carloads a year, which yields a big revenue to be divided between the growers, the pickers and packers, the railroads, the men who sell boxes, wrappers, tools and implements, fertilizers, and the food and clothing needed by those who live on the industry. The money goes into circulation and benefits thousands of people who never saw a growing orange tree, instead of going to foreign countries as it would do if the Californians had not by many years of experimenting and hard work built up this splendid industry.

This is but a sample of what other states will do at San Diego. Take Louisiana, for instance. If that State surrounds her building with a field of sugar cane—and how many persons ever saw cane in the field?—by a miniature rice field, a bit of the virgin forests which contribute to her wealth, an acre of cotton—in short, by a typical scene such as is familiar to the people of the great state at the delta of the Mississippi, she will have the framework for an exhibit which will attract as much attention, it may be predicted, as the exhibit itself.

And there is Texas, greatest State territorially of all in the Union. With her orange groves away down on the Gulf Coast, her fruit orchards, her rice and cotton fields, her oil—her hundred industries bringing in millions of treasure annually, Texas is in a position to make an exhibit—and she will make it—which will rival any, if indeed it does not carry off the honors for its novelty and interest.

To call the roll of the States of the great West would take time but it may be taken for granted that they will rally to the opportunity and unite in such a showing as will surprise

even those who have thought that they were acquainted with their possibilities and promise. By visiting San Diego the average citizen will have all of these things brought to him in the most graphic form, and he will see more than he could well take in by years of hap-hazard travel.

F. J. DYER.

TREE SEED NOTES

The Northern Colorado Nursery Company is now cleaning up Rocky Mountain tree seeds. They are shipping seeds this year to France, Germany and Denmark, as well as New York, Philadelphia, and other American cities. This firm has built up an extensive business in this line and they buy and gather all the native seeds that can be obtained.

AMERICAN FORESTRY CO.'S NEW MANAGER

Dr. Frederick W. Hamilton, recently President of Tufts and Jackson Colleges, has re-entered the business field from which he withdrew several years ago for professional work as an educator, and has taken the position of General Manager of the American Forestry Company.

As a young man, Dr. Hamilton's successful business career combined with his broad education early brought him to the front. For many years he was a trustee of Tufts College and later became its President, keeping at the same time other high positions in the educational world, including membership of the Massachusetts State Board of Education.

The success and rapid growth of the American Forestry Company, with its "Little Tree Farms," open a field of unusual opportunity to a man of Dr. Hamilton's caliber, in the combination which forestry offers of the commercial and the æsthetic, and it is, therefore, with much enthusiasm that Dr. Hamilton has associated himself with the Company, and taken up his new duties.

This affiliation will allow Mr. Theodore F. Borst, Forest Engineer of the Company, to devote his energies more exclusively to the professional side of the prosperous industry of which he was the founder.

Dr. Hamilton will from now on make his headquarters at the offices of the American Forestry Company at 15 Beacon Street, Boston, Mass.

The American Forestry Company is to be congratulated upon obtaining the services of a man who has made a marked success in the fields both of business and education.

The man that solves the publicity question even in a minor degree is the most successful. If you have a specially good stock of any particular thing let the readers of the NATIONAL NURSERYMAN know it.

THE STARK ORCHARD BOOK

This booklet published by the Stark Bros. Nurseries and Orchards Co., Louisiana, Mo., is offered free upon application to a reasonable number of subscribers to the NATIONAL NURSERYMAN.

It is a book of 32 pages exclusively devoted to the planting and care of trees. It is wonderfully terse, practical and complete, with illustrations that do illustrate.

It is all kernel and no chaff and the source guarantees the reliability of the information it conveys.

NEW PLAN OF SEED EXTRACTION FROM PINE CONES

The Forest Service is experimenting with new ways of extracting the seed from the pine cones cheaply and efficiently. The policy is to collect seed in good seasons and in localities where an abundant crop has been produced. Thousands of bushels are gathered in one place and from these the seed has in the past been extracted by the slow process of heating the cones artificially to make them expand, when the seed is shaken out, collected, and cleaned. When conducted in the winter on a large scale the work is greatly delayed by the difficulty of securing plenty of hot air, and at the same time keeping it dry. The cones give off their moisture and soon surcharge the air to saturation and the admittance of fresh air lowers the temperature below the point of effectiveness. For these reasons the capacity of even large plants is usually limited to turning out from one hundred to one hundred and fifty bushels per day. During the last season the Service has been experimenting with modifications of a grain threshing machine and has been successful in District 1 this summer in threshing white pine seed from the cones when the latter were partially dry. It is thought that by further modifying an arrangement of the teeth in the cylinder, seeds may be successfully threshed from cones like yellow pine, Douglas fir, and even lodgepole pine. If this proves possible the capacity of a seed extracting plant can be increased to ten times its former output. The chief difficulty to overcome is the cracking and spoiling of the seeds during the process of threshing. A small experimental plant on the Kaniksu National Forest was installed this spring and produced results which are greatly encouraging. Very little harm was done to the seed and the cones were handled at the rate of one thousand bushels per day where formerly one hundred and fifty bushels was a good day's work.—*American Forestry*.

HONORING AN APPLE

An interesting ceremony occurred near Morrisburg, Ontario, June 8. A monument was unveiled to an apple tree. The farmers of Dundas Co., Ont., raised the money by popular subscription and placed a marble stone close to the spot where the original McIntosh Red apple tree grew. The old tree stood for over a century and then fell. The *Toronto Daily Mail* gives the following bit of history:

About 115 years ago Mr. John McIntosh, who came to Canada with the United States Loyalists, and settled in Matilda Township, found a number of young apple trees while clearing a place for a home. These he preserved. One of them produced fruit of such superior color and quality that he named it McIntosh Red. It bore an abundance of fruit and soon attracted the attention of men who could appreciate its worth and possibilities. His son Allan propagated from it, and commenced to disseminate the variety. In recent years it has been widely circulated, and now is planted in all parts of the continent where dessert apples flourish. In 1893 the old tree was partly injured by fire, but continued to bear on one side until 1908, when it failed forever. On the old McIntosh homestead, due honor is being done to it and to its discoverer in the unveiling of a monument. The occasion is a deserving tribute to both.

WOMEN AS GARDENERS

The Women's Agricultural and Horticultural International Union held its exhibition and sale of farm and garden produce, etc., at the Royal Horticultural Hall, Vincent Square, Westminster, on October 23. Whether the show was a success from a business point of view we do not know, but, judging with all leniency with regard to the circumstances under which the show was held, it cannot be said to have been a success from a horticultural point of view.

Just why this should be so it is most difficult to ascertain. The fact remains that, generally speaking, the garden produce was of third rate quality, and was thrown together on the stages without the smallest regard to the most elementary principles of the decorator's art. We do not wish to criticise harshly, and certainly not unjustifiably. It is because we believe that with a little more trouble, a little more sincerity and belief in the ideal this union has set itself to attain, the woman horticulturist and her cousin the woman agriculturist would soon be lifted to the plane of efficiency held by men in this particular pursuit. Why cannot women grow equally with men fine fruits, flowers and vegetables? Why should the gentler sex be content with abominable clashings of colors and inharmonious arrangement of groups of flowers and foliage? The male gardener would move heaven and earth, so to speak, to make his exhibit worthy of a place in the show. Surely there is no reason whatever. It is only a question of perseverance and the necessary experience, that is all.

This, then, is the task the now numerous colleges and horticultural institutions must set about to accomplish. There is, we believe, ample room in the horticultural world for women, but there is no space for the incompetent and the make-believer. There is no half-way house; it is a case of "get on or get out." The exhibits at this event, except in a few instances, were not such as would inspire other women to take to gardening, but we refuse to believe that women gardeners of the true type are as incapable of doing first-class work.—*Journal of Horticulture*.

TEACHING THE CHILDREN TO LOVE THE TREES

The New York State College of Forestry at Syracuse University, designated and established by the Legislature for educational work in Forestry in New York, has sent a letter to the Principals of all the High and Preparatory Schools of the State offering to give illustrated lectures and demonstrations upon Forestry before the schools so that every child in the State may understand what Forestry is and may learn to love the trees and forests.

THE NURSERY EMPLOYEE

There is no questioning the fact that the skilled employee in the nursery business is becoming scarcer every year. Everywhere during the planting and shipping season the cry of the foreman is heard "If I only had some men to rely on; someone who can do the work without being watched all the time," but he has them not and so wears his life out in an effort to be at several places at one time, or puts an inexperienced man in charge and takes attendant losses as something which cannot be helped.

Thousands of dollars worth of stock is lost every year for lack of men who know what they are doing; who have studied the necessities of the plants which they are handling; and there surely must be a reason for this lack.

In most other trades employers have applicants waiting their turn to learn the business; not so in the nursery and why? Go out in the nursery and listen to the men who have spent years in the work, these men will give you the answer. To secure their knowledge they have spent long hard years of earnest labor, out in all kinds of weather, covered with mud and dirt, making longer hours than any other trade, rushed almost to death in the spring and fall, and only good behavior keeping them from a winter's vacation—is it any wonder they are discouraged when they find their pay envelope the least of any of the trades and advise their friends and children to keep out of it?

In the vicinity of Philadelphia when a young man serves three years at plumbing he gets thirty cents and upwards an hour, carpenters get forty and fifty cents, so through all trades.

After serving three years in a nursery, if a good worker, he may get fifteen cents and later if he improves may be raised to twenty cents.

Some writers from the employers' side of the question try to equalize the difference by telling the men they are nature's helpers and should feel highly honored for the opportunity. This sentiment is alright but cannot be exchanged for food, nor even the beautiful trees and flowers which we help create. It is these conditions which cause the young man to select some other trade or profession.

There are many boys and young men working in the nursery who work day in and day out without learning any more than their daily round of work. While this is due to the lack of ambition on their part, yet many of them could be aroused to effort by a little kindly interest and help from those over them.

My own experience was that the employer was interested in me so far as he could get profit out of my labors at that time. The nursery and opportunity were there provided, I did it in my own time, but those that were in a position to encourage and instruct were too busy to show me what was necessary to get the most work out of me.

What is needed at the present time is more inducements. Give the employee a standard of efficiency which he must reach, with the assurance that when he does reach it he will secure a wage which will compare with the other trades. Let the employer feel that it is to his interest and will pay in the long run, if he spends a little time and money teaching the young men and making the working conditions as pleasant and inviting as possible, making him feel that he is more than a common laborer; then and only then will the workers become efficient and much of the heavy loss due to careless handling will be done away with. It is far better to pay it to the men than to throw it to the winds.

G. K.

One does not have to own a large fruit farm to enjoy excellent fruit of his own raising. No lot is too small for a few trees, and they will afford much pleasure. *Connecticut Farmer*.

U. S. Dept. of Agriculture

GYPSY AND BROWN TAIL MOTH QUARANTINE

In our last issue we gave an account of the Hearing before the Horticultural Board at Washington, also on another page of the same issue the territory it was proposed to quarantine so that it is not necessary to repeat. The following are the Regulations as finally passed and published in Circular issued November 13th, 1912, under the title "Notice of Quarantine No. 4, Domestic."

GYPSY MOTH REGULATIONS

Coniferous trees of the area quarantined for the gipsy moth, such as spruce, fir, hemlock, pine, juniper (cedar), and arborvitæ (white cedar), known and described as "Christmas trees," and parts thereof, and decorative plants of the area quarantined for the gipsy moth, such as holly and laurel, known and described as "Christmas greens or greenery," shall not be moved or allowed to move interstate to points outside the quarantined area.

Forest plant products of the area quarantined for the gipsy moth, including logs, tan bark, posts, poles, railroad ties, cordwood, and lumber, and field-grown florist's stock, trees, shrubs, vines, cuttings, and other plants and plant products for planting or propagation, of the area quarantined for the gipsy moth, excepting buds, fruit pits, seeds of fruit, and ornamental trees and shrubs, field, vegetable and flower seeds, bedding plants and other herbaceous plants and roots shall not be moved or allowed to move interstate to any point outside the quarantined area unless and until such plants and plant products have been inspected by the United States Department of Agriculture and pronounced free from the gipsy moth.

BROWN-TAIL MOTH REGULATIONS

Deciduous trees or shrubs of the area quarantined for the brown-tail moth, or parts thereof, including all deciduous field-grown florist's stock, vines, cuttings, grafts, and scions shall not be moved or allowed to move interstate to points outside the quarantined area, unless and until such plants and plant products have been inspected by the United States Department of Agriculture and pronounced to be free from the brown-tail moth.

GENERAL REGULATIONS

(1) Every car, box, bale, or other container of plants and plant products of which inspection is required by these regulations shall be plainly marked with the name and address of the consignor and the name and address of the consignee, and shall bear a certificate showing that the contents have been inspected by the United States Department of Agriculture and found to be free from moth infestation.

(2) Carload and other bulk shipments of plants and plant products for which inspection is required by these regulations shall not be transported or offered for transportation interstate by cars, boats, and other vehicles, unless each shipment is accompanied by a certificate showing that the plants and plant products have been inspected by the United States Department of Agriculture and pronounced to be free from moth infestation. The inspection certificates shall accompany the waybills, conductors' manifests, memoranda, or bills of lading pertaining to such shipments made by cars or boats.

(3) Certificates of inspection will issue only for plants and plant products which have been actually inspected by the United States Department of Agriculture, and the use of such certificates in connection with plants and plant products which have not been so inspected is prohibited.

(4) Where inspection and certification are required by these regulations, inspection and certification by an inspector or other agent of the Federal Horticultural Board are meant, and such inspection and certification will be furnished without the payment of fees or charges of any nature.

(5) Plants and plant products, of which the interstate movement is prohibited or restricted by these regulations and which are grown outside the areas quarantined for the gipsy moth or the brown-tail

moth, may be shipped interstate from points within the quarantined areas to points outside the quarantined areas under permit from the Secretary of Agriculture. Permits will issue only for plants and plant products which are not infested with the gipsy moth or brown-tail moth and transportation companies shall not accept or move interstate from within the quarantined areas such plants and plant products grown outside the quarantined areas, unless each shipment is accompanied by a permit issued by the superintendent of moth work* at Boston, Mass.

(6) Persons intending to move or allow to be moved interstate plants and plant products for which certificates of inspection or permits are required by these regulations, will make application therefor as far as possible in advance of the probable date of shipment. Applications should show the nature and quantity of the plants or plant products it is proposed to move, together with their exact location and, if practicable, the contemplated date of shipment. Applicants for inspection will be required to place the articles to be inspected so that they can be readily examined. If not so placed inspection will be refused.

(7) The interstate movement of all classes of plants and plant products entirely within the area quarantined for the gipsy moth and the brown-tail moth will be permitted without restrictions, other than those which may be imposed by State officials at points of destination.

On and after November 25, 1912, and until further notice, by virtue of said section 8 of the act of Congress approved August 20, 1912, it shall be unlawful to move in interstate commerce any of the above-described plants or plant products from the areas herein quarantined, except in accordance with these regulations and amendments thereto.

Done at Washington this 5th day of November, 1912.

Witness my hand and the seal of the United States Department of Agriculture.

WILLET M. HAYS,
Acting Secretary of Agriculture.

*Blanks on which to make application for inspection or for permits will be furnished upon request by the United States Department of Agriculture, Bureau of Entomology, 6 Beacon Street, Boston Mass.
[No. 4.]

THE TERM "HORTICULTURIST"

As to what really constitutes a bona-fide horticulturist has long been a debatable question. It is one of those evergreen topics that are discussed year in and year out, whenever two or three gardeners assemble. It is held by some that a horticulturist is one who is connected in any manner or degree, directly or indirectly, with the cultivation or sale of fruit, flowers, or vegetables. In that sense "horticulturist" is a very wide term indeed, and it is difficult to see how or why a florist, who does nothing but prepare, as it were, the product of the garden for sale, or the market salesman who barter his thousand cabbages or his ton of potatoes, while nine-tenths of the populace are slumbering, is justified in calling himself a horticulturist. The friendly antagonism that has existed between the private and the nursery gardener is as old and ridiculous as the two-headed Janus. Recently I was rubbing shoulders with an element of both, when the peace was broken by a statement from the nurseryman to the effect that to be a skilled hand it was more essential for the trade employee to have botanical science included in his training than in the case of the private gardener. The latter retorted with a long list of "essentials" common to a private gardener's lot that never came within the cycle of a year's work in the nursery.

But, however varied the terms may be that are employed to distinguish the various departments connected with horticulture, there will always exist that spirit of good fellowship and freemasonry which for more years than any in the profession can remember has dwelt in the hearts of true horticulturists, be they gardeners, florists, nurserymen, or all three.—*Journal of Horticulture.*

SELLING METHODS

STANLEY V. WILCOX

The majority of retail sales, and this applies particularly to ornamentals, are made thro salesmen or agents who know or should know trees and plants very intimately. The great bulk of these sales are made upon the recommendations of these men.

The majority of property owners know very little about nursery stock and usually rely on some one to suggest to them the best selection for their individual needs. If this is done carefully and the results are satisfactory it is only logical to look for continuous music.

Now right here is where many nurserymen fall down. Acting under the impulse to secure just as many agents as possible, many men are employed who have not the experience to make the right suggestions. Bad results follow which means of course no more business from that quarter.

Pick up almost any newspaper in our large cities and you will find advertisements for nursery salesmen—"Experience unnecessary." Surely if there is one business that demands a salesman should have a knowledge of his product, this is the one. There is no need of rehearsing the many familiar stories of wonderful plants offered and sold by the "tree agent" and it is not fair to the trade in general that such methods should still be in favor.

An effort should be made, therefore, to improve our selling methods along this line in particular.

A well organized selling force of experienced salesmen would be the ideal solution and some firms have attempted this in a small way and very successfully.

Where the business does not warrant such an organization, the local agent is the next consideration.

Should we not hold more closely to the old rule of "a few good rather than a great many poor." Select such agents carefully. If you have a good line—why not a good agent? Houses in other lines of business usually find good men and not infrequently the better the product the better the new. Keep this in mind as you employ agents from time to time.

Where are such men to be had? There is hardly a community that does not have one or two men who would make high class representatives. Interest the local florist more. He comes closely in touch with the flower and plant loving public and would be the very man to represent a first-class nursery.

Many retired gardeners would be glad of the opportunity to represent a nursery in the community where they live.

No one knowingly chooses a poor agent when a better one is to be had. The idea is to look the territory over carefully with the view to getting the right man, and better more than a representative who will misrepresent and all that this implies.

Once you get a good agent, keep him by working with him on good prospects. Follow up his inquiries—be liberal with literature and make the man feel he is a part of the organization and not working as an individual.

NATIONAL NURSERYMAN PUBLISHING CO.:

Find check to cover advertising for October and November. Same is proving very satisfactory indeed. GRAY'S NURSERY.

DUTY ON ROSA RUGOSA

It is to be hoped that the question of the proper duty on *Rosa rugosa* and *rugosa alba* will be settled for all time by the decision of the General Board of Appraisers, in the case of McHutchison & Co., who protested an assessment of four cents each, which the appraiser had assessed on an importation of these plants.

The case was heard before the General Board of Appraisers last Spring. McHutchison & Co., called the late Prof. John Craig and Thomas B. Meehan as experts, both of whom testified that *Rosa rugosa*, *rubra* and *alba* were not commercially known as "rose bushes" but as "nursery stock."

The decision of the Board handed down Nov. 7th, upholds this evidence, and rules that the plants should be assessed as "nursery stock" and duty levied at twenty-five per cent ad valorem.

As this question has been before the Board several times and various decisions have been rendered, the present case is of great interest to nurserymen, and we are, therefore, quoting the full text of this last ruling.

"30439—*ROSA RUGOSA* SEEDLINGS, SHRUBS, NURSERY STOCK—Protest 558799 of McHutchison & Co. (New York):

"WAITE, General Appraiser: The classification of a kind of plant or shrub described and invoiced as '*Rosa Rugosa*' is here in question. It has been assessed at the rate of four cents per plant under the provision in paragraph 264, tariff act of 1909, for the 'rose plants, budded, grafted, or grown on their own roots.' Protestants claim duty should be levied at the rate of 25 per cent. ad valorem under the same paragraph. The paragraph reads as follows:

"264. Stocks, cuttings or seedlings of *Myrobolan* plum, *Mahaleb* or *Mazzard* cherry, *Manetti*, multiflora and briar roses, three years old or less, one dollar per thousand plants; stocks, cuttings, or seedlings of pear, apple, quince, and the *Saint Julein* plum, three years old or less, two dollars per thousand plants: rose plants, budded, grafted, or grown on their own roots, four cents each; stocks, cuttings and seedling of all fruits and ornamental trees, deciduous and evergreen shrubs and vines, and all trees, shrubs and plants, and vines commonly known as nursery or greenhouse stock, not specially provided for in this section, twenty-five per centum ad valorem.

"Considerable testimony has been taken in this case, from which it appears that these *Rosa rugosa* plants in question were produced from seeds, that they are over three years old, and that they are not commercially included within the term 'rose plants.' The testimony further shows that *Rosa rugosa* is commonly known as nursery stock, and is used for landscape purposes, 'massing, grouping, planting for hedges, on account of its hardiness and general adaptability to outdoor conditions,' that it is not commercially grown for its bloom, its single white and red blossoms lasting only for a short season; that it is principally cultivated for its attractive foliage. The several witnesses agree that rose plants which are grown for their bloom are never propagated from seed, for the reason that they do not come true to type; that the commercial method of producing such plants is by budding, grafting, or from cuttings or slips, this last-mentioned method being described in paragraph 264 by the phrase 'grown on their own roots.'

"The board has in several cases dealt with the question of the classification of *Rosa rugosa*. In G. A. 4635 (T. D. 21922) it was held that a species of briar rose known as *Rosa rugosa*, which had been grown from seed, was properly dutiable under paragraph 252, tariff act of 1897, as a briar rose, and not as a rose plant budded, grafted, or grown on its own roots. (See also G. A. 7284; T. D. 319310.) The law of 1897 (par. 252)

did not' contain the limitation 'found in the corresponding paragraph of the law of 1909, (par. 264), namely, that to be classified under the specific designation of briar rose as a plant must be 'three years old or less.' However, protestants in this case have not claimed that these goods should be classified under the briar-rose provision, but, admitting that they are over three years old, and contending that they are not 'rose plants, budded, grafted, or grown on their own roots,' they make the claim that they should be relegated to the nursery-stock class provided for in the last clause of paragraph 264 at 25 per cent ad valorem.

"It was held in G. A. 4635, Supra, that commercially the term 'grown on their own roots,' found in the paragraph of the tariff act under consideration, applies only to rose plants propagated from slips or cuttings. Such holding is amply supported by the testimony in the case now before us. It would therefore follow that a *Rosa rugosa* seedling, the merchandise at bar, would not be within the part of the paragraph providing for 'rose plants, budded, grafted, or grown on their own roots.' We think the testimony clearly shows that these goods are known in the trade as nursery stock. The case is distinguished, we think, from that recently decided by the Court of Custom Appeals (*Maltus v. United States*, T. D. 32909) for reason that very little, if any, testimony was given in the *Maltus* case which would warrant placing this class of importation within the category of nursery stock, the only question that seems to have been dwelt upon being that of the age of the plants.

"We, therefore, find the merchandise in question is excluded from the briar-rose provision by being over three years old; that it is also excluded from the rose-plant provision by reason of the definition above cited, and that it is therefore properly dutiable at 25 per cent. ad valorem under the provision for nursery stock in the same paragraph. The protest is sustained."

A COURSE IN CITY FORESTRY OFFERED BY THE NEW YORK STATE COLLEGE OF FORESTRY AT SYRACUSE UNIVERSITY

So many villages and cities in New York are interested in the right development of street and park planting and so much work is being done by men not really fitted to carry on such work, that the New York State College of Forestry has developed a four-year course for training of City Foresters. This course will open in September, 1913, and it is expected will attract many young men through this State and New England. The course for a year and a half will consist of foundation work in Botany, Chemistry, Geology and Soils, Mathematics and Surveying. Beginning with the Sophomore year, courses will be given in Forestry, Arboriculture, and Trees and Shrubs. Especially thorough courses will be given in Forest Entomology and Pathology, and Spraying and Spraying materials. The students will be given an unusual amount of practical work in Plane and Topographical Surveying so that they may lay out streets, public and private grounds and parks for planting.

Many of our larger cities are now employing trained Foresters for the care of street and park trees and there is every indication that villages and cities throughout the East will take on such men within a very short time. An interesting example of the attitude of the people in this matter is shown in Bulletin No. 100 of the Massachusetts Forestry Association, which is entitled "150 Trained Foresters Wanted in Massachusetts." This circular goes on to say that this may not be the exact number needed but that the cities are

considering the taking on of trained men and that all of the cities of Massachusetts and fully twenty-five per cent. of the towns are capable of supporting Foresters. This same might be said of the future in New York, New Jersey, Pennsylvania and other eastern states. Many of the cities are purchasing considerable areas of wild land to be used eventually for parks and some of this wild land is forested and should be given proper silvicultural treatment both for future park effects and to give a reasonable income from cord wood and other supplies from the forest. There are numerous examples of cities in Europe which own sufficient forest land to provide an income which supports the entire administration, doing away with all taxes. It may be some time before such conditions arise in this country and yet the fact remains that there is now a strong demand for men thoroughly trained as City Foresters.

SPRAYING TREES WITH LIME WASH

We recommended spraying the trees with lime white wash before the lime sulphur wash was known. We have since tried spraying the trees with the home boiled lime sulphur and find that, all things considered, it is quite as effective in holding the fruit buds dormant and making them resistant to cold as is the lime white wash itself. There is this difference between them. The lime white wash reflects all the heat of the sun during the winter maintaining them a little below atmospheric temperature. The sulphur of the boiled lime sulphur wash adds enough color that not quite all this heat is reflected and yet the lime sulphur wash reflects enough heat that no serious warming up occurs.

We have never been able to fix a pure lime wash so as to make it stick very well. It shells off more or less unless frequently applied. The lime sulphur wash sticks beautifully and persistently so the trees remain better covered with it.

The lime sulphur in addition to reflecting the heat and holding the buds dormant will kill all San José scale and some other winter insects and eggs which in parts of the State may be troublesome. I would suggest the home boiled lime sulphur wash then for this winter spray, certainly in all districts where there is San José scale or eggs of plant lice wintering on the trees or where leaf curl is bad. Even where there are no insects to need the lime sulphur spray, I think it will answer as well for the average grower as the pure lime because it sticks so much better.

I have not tried the commercially prepared lime sulphur and do not know how it would stick. I can see no reason, however, for the lime sulphur injuring the lime wash in any way in case one wanted to use the ready prepared mixture in the lime white wash. Personally, however, I should prefer to risk the home boiled lime sulphur in cases where the growers are willing to make it because I know it will stick and is efficient.

J. C. WHITTEN.

THE NATIONAL NURSERYMAN:

Enclosed find \$1.00 for renewal of NATIONAL NURSERYMAN for next year. Yes, we fully appreciate the value of your paper and the value of it to the nursery trade.

Yours very truly,

MARBLE CITY NURSERY CO.

MARYLAND WEEK AT BALTIMORE

The Maryland State Horticultural Society, Crop Improvement Association, State Dairymen's Association, State Beekeepers' Association and Farmers' League of Maryland held their combined exhibition at the Fifth Regiment Armory from November 19-23d.

The combining of Horticultural, Agricultural and allied Associations gives splendid opportunity of showing the resources of the State and the progress being made along the different lines.

The exhibits were well arranged and showed first class management. The Apple exhibit being especially fine and seemed to dominate the fruit section. In fact there seemed to be a lack of other kinds of fruit especially nuts, which is surprising considering how favorably Maryland is situated for growing them. What were there were of excellent quality. The commercial exhibits of agricultural machinery and Orchardists supplies were in strong force.

The Maryland State Board of Forestry had an interesting exhibit of native woods and forest tree seedlings. The latter was especially good in familiarizing the public with what a seedling looks like. The Nurserymen were represented by Harrison's Nurseries, Berlin, Maryland, with a group of fine evergreens, fruit and deciduous ornamental trees. J. W. Brandt Nursery Co., Upper Falls, Md., with evergreen and fruit trees. Franklin Davis Nursery Co., Baltimore, Md., with fruit trees, well grown Norway Maples, and a collection of Evergreens, noticeable among the latter were large Lawson's Cypress indicating the mildness of the climate in their locality.

Thomas Meehan and Sons, Germantown, Pa., had an attractive exhibit of Globe Box, English Hollies, Hardy Chrysanthemums and Nurserymen's Sundries, also prize paintings of their famous mallows.

Isaac H. Moss, Govanstown, Md., received the blue ribbon for group of evergreens.

The Westminster Nursery also exhibited evergreens and fruit trees and showed fine samples.

Richard Vincent, Jr. & Sons Co., had a fine display of Hardy Chrysanthemums.

IMPORTERS' NOTES

Shipments are now arriving in large volume from Boskoop, Oudenbosch, and other Holland points—Belgium shipments are over for this season—German shipments of Lily of the Valley Pips are commencing to arrive.

French shipments will not arrive until about the middle of December. The plant Quarantine Act will probably limit these, as the extra work will prevent the shippers getting out so many orders in the short time, besides the certificate requirements will largely prevent French nurserymen buying shortages from their neighbors, as has been their custom.

McHUTCHISON & Co.

EDITOR NATIONAL NURSERYMAN,

Rochester, N. Y.

Gentlemen:

"George A. Sweet is dead." We have just received this sad message from our Dansville office. Thus ends a long

up-hill struggle of 45 years against ill health. He made a brave fight and in his passing the nursery world is deprived of one of its noblest and best men, a gentleman of the "Old School," a true, warm hearted friend and withal one of nature's noblemen.

On our visits to Dansville, one of our greatest pleasures was the anticipation of calling on our old friend, George A. Sweet. In recent years, in spite of his long suffering, he still retained his cheerful optimism. For many years he has been our friend, good, generous and big hearted, the kind of a man whose presence and whose life makes the world better and makes life seem "worth while."

He is gone and there is no one to fill his place. We shall miss him.

Yours very truly,

STARK BROS.

NEW REGULATIONS FOR SHIPMENT OF NURSERY STOCK INTO MASSACHUSETTS

For shipment of nursery stock into Massachusetts, it has heretofore been necessary to attach tags furnished by the Massachusetts State Board of Agriculture. Those issued this year expire on Nov. 30th. A new law has gone into effect abolishing the use of such tags after December first. All stock will be examined on delivery to consignee, and such action taken by the State Inspectors as its condition requires. It may be accepted, fumigated in whole or in part, or returned to consignor, according to what is found, with costs on consignor.

George S. Josselyn, for many years in the nursery business at Fredonia, N. Y., and widely known in the trade, generously remembered his employees in his will, which recently was admitted to probate. The sum of \$23,000 of his estate, valued at \$170,000, was left to some of his old and faithful employees. Maurice Young was bequeathed \$7,000; A. H. Lewis, \$5,000; Carl Privateer, \$3,000; Thomas Halligan, \$2,000; Bert Martin, \$2,000; Julia Ryman, \$2,000; Charlotte Haniser, \$2,000. Carl Privateer, one of the beneficiaries died last week.—*Florists' Review*.

CENTERVILLE, IND.

E. Y. Teas & Son in September last sold their entire business, stock and fixtures to the Cunningham Nursery Co., of Seymour, Ind., and the stock is being transferred to the new location as rapidly as possible, where this new firm already has some few hundred acres in choice nursery stock. The son of Mr. Teas will engage in other business. E. Y. Teas, at nearly 83 years of age, and with 65 years' experience in horticultural pursuits, will endeavor to take life more leisurely than he has been able to in the past, and will occupy himself with pursuits suitable to a man of his years.—*Florists' Exchange*.

THE NATIONAL NURSERYMAN is the Blue Book or Who's Who in the Nursery trade. See that your name gets in it and gets in it often. Enterprise and probity are the only requirements needed to entitle you to mention in its columns.

UNITED EDUCATIONAL EFFORTS

NURSERYMEN AND FRUIT GROWERS

By F. W. POWER, Principal Horticultural Correspondence School, Portland, Ore.,
before Nurserymen's Association

Up to the present most nurserymen have been too busy trying to grow and sell trees to spend any time in trying to educate the public, or even their own selling and propagating forces, along horticultural lines. The field forces have been given a few practical points on growing nursery stock, but nothing along general or scientific lines in most nurseries. The salesmen have been entirely neglected except what they could pick up from the catalogue, or by writing to the company asking special questions.

Much less time has the average nurseryman spent in trying to educate the fruit grower along such lines, except to induce him to plant more trees, with the expectation of reaping large profits, but has failed entirely in giving the grower any assistance as to how this was to be accomplished.

True, there are a few exceptions, where the busy nurseryman has taken time to write on scientific subjects and several valuable books and pamphlets have been published on different horticultural subjects, and numerous valuable magazine and newspaper articles written.

While a certain amount of good has been done by these few nurserymen in times past, how much more could have been accomplished if all nurserymen had used their time and influence in an educative work along these lines during the past twenty years, and how much further would the science of horticulture be advanced?

The address by E. J. Wickson, dean of the College of Agriculture of the University of California, before the nurserymen last year, and a short editorial in the *Oregonian* of January 15, 1912, well illustrated what the public is demanding of the nurserymen.

The *Oregonian*, in an editorial regarding the formation of a Horticultural Study Club, said: "In forming a Horticultural Study Club for scientific study of the Industry, Mr. McDonald, head of the big nursery at Orenco, has begun spread of the leaven that will stimulate fruit culture throughout the state. There can be no better starting point than where the trees begin their career, and results of the work will be vital and immediate."

As stated by Dean Wickson, if every nurseryman will see to it that every employee and salesman takes some kind of a course in horticulture, including plant diseases and pests, so that they can give to the planters the proper information, they would be doing their community and state a valuable service.

Just how far they should urge or compel their employees to go in the pursuit of horticultural knowledge is a question I am not prepared to answer, but personally I do not think that any of us can learn too much about the business. The more expert assistants we have around us, the better advice we can give to planters and the better trees we can place on the market. As far as time will permit, I read every bulletin possible pertaining to horticulture and you will find the up-to-date professors in our agricultural colleges doing the same.

As an instance of what a nurseryman can do with scientific knowledge, I might cite the following: Growing the Smyrna fig in the United States was made possible through the efforts of one nurseryman working in conjunction with U. S. Department of Agriculture. Many thousand dollars and much time was spent by Mr. Roeding before he was able to prove that the propagation of the Smyrna fig was not all in climate, and whatever the industry amounts to in California or elsewhere in the United States is, in the main, due to the educative campaign of Mr. Roeding. It is very doubtful if even the Asiatic growers knew the scientific reason for doing what they did in propagating this fruit.

Other instances could be cited where nurserymen have rendered a valuable service to horticulture along other educative lines. What we should strive for is more such educative and scientific work.

Nursery conventions and meetings of Horticultural Societies are valuable sources for acquiring and disseminating horticultural knowledge. No nurseryman or fruit grower should miss them when held in his vicinity. Winter short courses at the agricultural colleges, experiment station bulletins, etc., are other lines in which this education is being carried on. All these are good, but every nurseryman should in the future see that his employees and especially his salesmen are better posted in horticulture. I also advocate having horticulture taught in our public schools.

The Pacific Horticultural Correspondence school was started simply to enable those who could not spare the time or were unable to attend a regular agricultural college and take a four years' course to increase their knowledge of horticulture. As secretary of the Oregon Horticultural Society I had many callers and much correspondence from just such parties, especially newcomers. They wished to secure all information possible on fruit growing, but could not attend a regular college. From past experience in the nursery business I knew how much the salesmen needed all information possible. While it will probably be several years before it will pay running expenses, from an educative standpoint it cannot fail to be of great service to the grower and salesman who conscientiously studies the course.

The life of the nursery business depends upon the fruit grower being able to make a profit. A great future is open to the Pacific Coast states, the natural home of most varieties of fruit. If the newcomer is properly educated as to what and when to plant and how to successfully grow and ship after planting, the success of our business is assured.

Are the Pacific Coast nurserymen wide enough awake to meet the demand made upon them by the incoming fruit growers, and not leave them wholly to the mercy of the designing real estate man and unprincipled tree peddler? The nursery business is legitimate and fruit growing is one of the most profitable businesses when properly conducted and when the proper trees are planted in suitable locations and carefully cultivated. It is just as profitable now for you to sell the tree adapted to the soil and district as to sell something else, and in the future will find it much more so.—*The North West Horticulturist*.

Catalogues Received

W. N. Scarff, New Carlisle, Ohio. Semi-annual surplus list of choice new and standard Bush Fruits.

W. Fromow & Sons, Windlesham, Surrey, England. Wholesale catalogue 1912 and 1913 of Hybrid named Rhododendrons, etc.

Chase Bros. Company, Rochester, N. Y. Bulletin No. 1. Wholesale, price list for Spring, 1913.

American Forestry Company, S. Framingham, Mass. Wholesale price list of Forest Tree Seeds.

Marshall Bros., Arlington, Nebr. Descriptive catalogue for 1912-13.

Summitt Nurseries, Monticello, Fla. Catalogue and price list.

Sluis & Groot, Enkhuizen, Holland. Advance Price List of Vegetable, Flower and Agriecultural Seeds.

H. Merryweather & Sons, Southwell, Notts, England. Trade list of Ornamental Trees, Fruit Trees, Roses, Shrubs, Climbing Plants, etc.

Benj. Reid & Co., 72 Guild St., Aberdeen, England. Special offer to the Trade of Seedlings, Transplanted forest trees, shrubs, fruit bushes, etc.

S. Spooner & Sons, Hounslow, England. Wholesale list of fruit trees and roses.

Thos. Christie, Forres, England. Trade catalogue seedling and transplanted forest trees.

S. Bide & Sons, Farnham, England. Trade catalogue of hardy ornamental trees, roses, forest and fruit trees, etc.

John Jeffries & Son, Cirencester, England. Trade offer of fruit, forest and ornamental trees, roses, etc.

Hubert & Co., Ltd., Guernsey, England. Bulbs and plants.

Smith & Meldrum, Forfar, England. Wholesale list of forest trees.

Gray's Nursery, Pekin, Ind. Wholesale price list and catalogue.

Rice Bros. Co., Geneva, N. Y. Surplus Llist.

L. Spath, Berlin, Baumschulenweg, Germany. 1912 and 1913 catalogue.

Walter Chas. Slocock, Woking, England. Wholesale catalogue of large quantities of Rhododendrons, Azalea, Roses, etc.

Japan Nursery Co., Kawanishi Mura Kawabe Gun Settsu, Japan. Price list of bulbs, flower roots, nursery stock, etc.

Wm. Learmont & Son, Dunfries, Scotland. Wholesale list of nursery stock.

The Tokyo Plant, Seed and Implemment Co., Tokyo, Konoen, Japan. Wholesale price list.

Morrill & Morley Mfg. Co., Benton Harbor, Mich. "Eclipse Spray Pumps and Spraying Apparatus."

H. H. Pein Halstenbek, Germany. Wholesale price list of evergreens, deciduous trees and fruit tree stocks.

Stark Bros. Nurseries & Orchards Company, Louisiana, Mo., "Stark Orchard Book."

J. Hein's Sons, Halstenbek, Germany. Wholesale price list of evergreens, deciduous trees and fruit tree stocks, etc.

M. Herb, Naples, Italy. "Novelties of own raising."

Barbier & Co., Orleans, France. Nursery trade list for Autumn, 1912 and Spring, 1913 of fruit tree stocks, ornamental stocks, new plants, roses, etc.

C. H. Eldering & Sons, Heemstede near Haarlem, Holland. Special offer of Dutch bulbs.

Jackson & Perkins Company, Newark, N. Y. Budding Knife and Raffia Circular.

Peter Henderson & Co., Cortlandt St., New York City. Wheats, Grasses for fall sowing.

The Crest Nursery Company, Piqua, Ohio. Bulletin No. 1.

N. E. Copeland, Co., Oakland, Kas. "Apple and Japan Pear Seedlings."

"The NATIONAL NURSERYMAN is always of great interest to us, and we only regret not to see it every week instead of once a month. We consider it the best paper in our line."

Holland.

H. M. HARDYZER.

A. F. Guernsey & Co. of Schoharie, N. Y., say: "Can't get along without THE NATIONAL NURSERYMAN."

ROCHESTER FLOWER SHOW

The annual flower show at Rochester was opened November 5th, and was generally conceded to be of marked improvement over preceding ones. This perhaps was not so much on account of superior quality of exhibits so much as the general arrangement.

The City Officials lent their support, the Park Commission being one of the largest exhibitors. Their displays being beautifully arranged with autumn leaves, ornamental fruits and evergreens. A large collection of crataegus all labelled made it educational as well as artistic.

Highland Park Pinetum also contributed fine specimen evergreens which materially added to the general decoration. Nurserymen are gradually awakening to the fact that Flower Shows are worthy of consideration in bringing some of their choice things before the public.

DAMASCUS, OHIO, June 5, 1912.

THE NATIONAL NURSERYMAN PUB. CO.,

Gentlemen: Enclosed please find check to cover subscription to February 1913. We appreciate your valuable paper and feel lost without it.

Yours for success,

WEST BROTHERS.

Forest Tree Seedlings

20 acres of ASH SEEDLINGS from 6 inches to 4 feet at interesting prices.

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Might use some trade. Special prices on large quantities. Address

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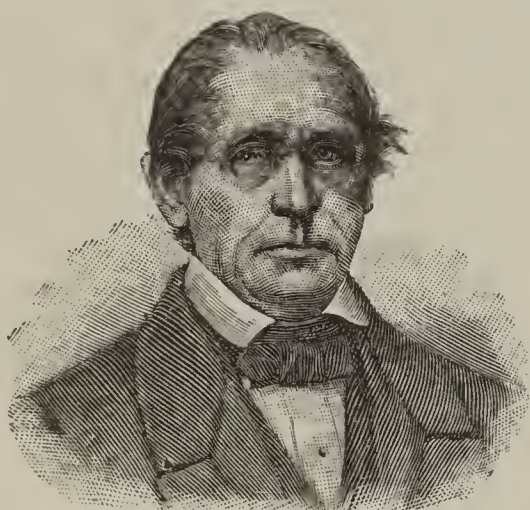
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Fruit, Shade and Ornamental Trees

∴ FLOWERING SHRUBS ∴
APPLE AND PEAR SEEDLING
∴ FOREST TREE SEEDLING ∴

We have a splendid stock of

Grape Vines

and other small fruit plants for the Nursery
trade, graded up to the highest standard
and sure to please you.

Give us a trial order, send in your list now for quotations

WILLETT & WHELOCK

North Collins, N. Y.

Look Over this List of Surplus Stock, Then Write Us at Once for Prices

Every specimen of every variety listed here is Harrison grown—that means grown on our own ground, by our own men, under our personal direction. Trees grown in this way are to be depended on—they have vitality and vigor, and a root system that will help them to live and grow almost anywhere.

Every tree you buy from us is guaranteed—and you are perfectly safe in guaranteeing them to your customers. Every variety is true to name, and we will not substitute any other variety unless given permission so to do. We are proud of the stock we send out; we know it is *right* before it leaves the row, or it goes to the brush pile. Drop us a line asking for complete list with prices—or give us a list of your needs and we will quote by first mail.

SHADE TREES

American Elm	500 7 to 8 ft.
	100 8 to 9 ft.
	500 10 to 12 ft.
	300 12 to 15 ft.
American Linden	200 5 to 6 ft.
	100 6 to 7 ft.
	100 7 to 8 ft.
	200 8 to 9 ft.
Black Locust	100 2 to 3 ft.
	200 3 to 4 ft.
	200 4 to 5 ft.
	200 5 to 6 ft.
Black Walnut	3000 2 to 3 ft.
	1000 3 to 4 ft.
	1000 4 to 5 ft.
	2000 5 to 6 ft.
	1200 6 to 7 ft.
	500 7 to 8 ft.
Box Elder	500 7 to 8 ft.
	1000 8 to 9 ft.
	500 9 to 10 ft.
	800 10 to 12 ft.
	800 12 ft.
	100 12 to 14 ft.
Carolina Poplar	500 5 to 6 ft.
	500 6 to 7 ft.
	500 8 to 9 ft.
	500 9 to 10 ft.
Catalpa Speciosa	1000 5 to 6 ft.
	1000 6 to 7 ft.
	2000 7 to 8 ft.
	1000 8 to 9 ft.
	2000 9 to 10 ft.
	1000 10 to 12 ft.
European Birch	500 7 to 8 ft.
	1000 8 to 10 ft.
	1000 10 to 12 ft.
European Horse Chestnut	100 4 to 5 ft.
	400 5 to 6 ft.
	500 6 to 7 ft.
	300 7 to 8 ft.
Honey Locust	200 6 to 7 ft.
	400 7 to 8 ft.
	200 8 to 9 ft.
	200 9 to 10 ft.
Norway Maple	2000 5 to 6 ft.
	1000 6 to 7 ft.
	1500 7 to 8 ft.
	5000 8 to 9 ft.
	5000 9 to 10 ft.
	2000 10 to 12 ft.
Russian Mulberry	600 6 to 7 ft.
	600 8 to 9 ft.
	1000 10 to 12 ft.
Silver Maple	1000 5 to 6 ft.
	1500 7 to 8 ft.
	5000 8 to 9 ft.
	5000 9 to 10 ft.
	10000 10 to 12 ft.
	3000 14 to 16 ft.

SHADE TREES—Con.

Sugar Maple	1000 5 to 6 ft.
	1500 7 to 8 ft.
	2000 8 to 9 ft.
	3000 9 to 10 ft.
	3500 10 to 12 ft.
	1000 12 to 14 ft.
Tulip Poplar	400 6 to 7 ft.
	600 7 to 8 ft.
	400 8 to 9 ft.
	500 9 to 10 ft.

EVERGREENS

American Arborvitae	500 18 to 24 in.
	700 2 to 3 ft.
	1000 3 to 4 ft.
	100 4 to 5 ft.
Austrian Pine	60 12 to 18 in.
	100 18 to 24 in.
	100 2 to 3 ft.
Blue Cedar	1000 3 to 4 ft.
	200 4 to 5 ft.
Colorado Blue Spruce	1000 12 in.
	300 18 in.
	30 4 ft.
Deodora Cedar	200 18 to 24 in.
	200 2 to 3 ft.
	200 3 to 4 ft.
	50 4 to 5 ft.
Douglas Spruce	150 18 to 24 in.
	150 2 to 3 ft.
	30 3 to 4 ft.
English Yew	90 18 to 24 in.
	200 2 to 3 ft.
	200 3 to 4 ft.
Hemlock Spruce	400 12 to 18 in.
	700 12 to 24 in.
	500 2 to 3 ft.
	25 5 to 6 ft.
Irish Juniper	50 18 to 24 in.
	100 2 to 3 ft.
	150 3 to 4 ft.
Koster's Blue Spruce	1000 12 to 18 in.
	500 18 to 24 in.
	500 2 to 3 ft.
	100 3 ft.
Nordmann's Fir	200 12 to 18 in.
	30 18 to 24 in.
Norway Spruce	5000 12 to 18 in.
	7000 18 to 24 in.
	4000 2 to 3 ft.
	2000 3 to 4 ft.
Prostrate Juniper	30 2 to 3 ft.
	40 Creeping Juniper
Pyramidal Arborvitae	1000 3 to 4 ft.
	1000 4 to 5 ft.
	800 5 to 6 ft.
	100 6 to 7 ft.

EVERGREENS—Con.

Retinospora Pisifera	400 12 to 18 in.
	50 18 to 24 in.
Retinospora Pisifera Aurea	10 2 to 3 ft.
	70 3 to 4 ft.
Retinospora Plumosa	80 18 to 24 in.
	25 2 to 3 ft.
Retinospora Plumosa Aurea	500 12 to 18 in.
	500 18 to 24 in.

EVERGREENS—Con.

Scotch Pine	200 2 to 3 ft.
	200 3 to 4 ft.
White Fir	60 18 to 24 in.
	60 2 to 3 ft.
White Pine	300 2 to 3 ft.
	300 3 to 4 ft.
	50 4 to 5 ft.
White Spruce	100 12 to 18 in.
	200 18 to 24 in.
	100 2 to 3 ft.

APPLES

Two Year

	1 in.	6-7 ft.	5-6 ft.	4-5 ft.	3-4 ft.
and up $\frac{1}{16}$ -1 in.	$\frac{5}{16}$ -1 in.	$\frac{1}{2}$ -1 in.	$\frac{1}{2}$ -1 in.	$\frac{1}{2}$ -1 in.	$\frac{1}{2}$ -1 in.
A. G. Russett	100	200	100	100	100
Baldwin	500	1000			
Ben Davis	500	2500	1000	500	100
C. R. June	50	400	100	50	20
Carthouse		40	50	30	20
Coffelt Beauty		60	60	60	40
Cooper's Market		90	80	70	50
Dominie		100	50		
Duchess			200	200	100
Early Strawberry		100	100	100	100
Fallowater	100	1000	1000	100	100
Fanny		30	20	10	10
Golden Sweet		150	150	100	50
Gravenstein			200	200	50
Ingram		60	50	50	20
Jefferis		20	20	20	20
King		10	30	20	20
Kinnard's		50	25	25	20
Lankford		40	40	40	20
Late Raspberry		100	100	100	50
Lawver	20	100	50	50	50
Longfield	20	20	20	20	20
Mann	50	200	200	100	20
Mo. Pippin	100	500	300	200	100
Myrick	50	100	50	50	
Nero	100	800	1200	500	
N. W. Greening	200	1500	1000	500	100
P. W. Sweet	50	400	400	200	100
Paynes' Late Keeper		50	50	40	
Pewaukee	20	20	50	30	20
Rambo	50	200	300	200	50
R. I. Greening	70	120	700	100	100
Red Astrachan	200	2000	100	500	
Rome Beauty			100	50	
Roman Stem			100	50	
Scott's Winter			100	50	
Smith's Cider	90	150	100	70	
Springdale		100	60	20	
Stark	500	800	500	500	
Strawberry (Chenango)	100				
Townsend		100	100		
Walbridge	20	80	20		
Winesap	2000	2000	300	500	
Yellow Transparent	2000	3000	3000	2000	
Yellow Belle	50	300	200	100	
York Imperial	2000	5000	5000	2000	

CRAB APPLES

Golden Beauty	200	1000	1000	500
Hyslop		500	500	100
Transcendent	300	1000	500	100

APPLES

One Year

5-6 ft. 4-5 ft. 3-4 ft. 2-3 ft. 1-2 ft.

A. G. Russett	100	200	100	90
Alexander	500	500	500	100
Baldwin	5000	5000	3000	1000
Ben Davis	3000	2000	1000	500
C. R. June	300	150	90	
Carthouse	150	100	90	
Coffelt Beauty	60	60	50	
Cooper's Market	150	100	50	40
Dominie	100	150	100	
Duchess		500	500	200
Early Harvest	1500	1000	1000	500
Early Strawberry	100	100	100	50
Ensee	50	90	40	20
Fallowater	800	700	400	250
Fanny	50	50	50	50
Fourth July	700	700	500	
Gano	3000	3000	3000	1000
Golden Sweet	1000	1000	1000	100
Gravenstein	1000	1000	1000	100
Hubbardston	500	300	100	20
Ingram	100	100	100	20
Jefferis	40	40	40	20
Jonathan	3000	2000	2000	100
King		200	200	100
Kinnard's	100	100	100	100
Lankford	50	50	50	50
Lawver	70	60	60	40
Limber Twig	90	120	80	20
Longfield	100	50	50	10
Mann	90	50	50	
McIntosh	1000	1000	1000	1000
Mo. Pippin	200	200	100	50
Myrick	200	100	50	
Nero	1000	1000	500	500
N. W. Greening	2000	1500	2000	200
P. W. Sweet	500	800	500	100
Pewaukee	100	40		
Rawles' Janet	150	150	100	
Rambo	500	800	150	
R. I. Greening	500	500	300	100
Red Astrachan	3000	2000	1000	200
Rolfe	100	150	80	50
Rome Beauty	3000	2000	1000	500
Salome	100	100	50	50
Scott's Winter	100	100	50	
Smith's Cider	90	300	100	100
Smokehouse		200	190	50
Spitzenburg	400	400	400	100
Springdale	100	100	100	50
Stark	500	700	500	100
Stayman	2000	2000	5000	2000
Sweet Bough	500	200	200	100
Strawberry (Chenango)	100	100	100	100
Talman Sweet	500	700	300	100
Wagner	100	500	500	500
Walbridge	300	200	200	60
Wealthy	100	3000	3000	1000
Winesap	5000	5000	3000	1000
Winter Banana	500	200	300	100
Rolf River	1000	1000	500	200
Yellow Transparent	5000	5000	2000	1000
Yellow Belle	50	150	50	20
York Imperial	10000	10000	5000	5000

CRAB APPLES

Golden Beauty	300	300	200	200
Hyslop	40	150	150	90
Transcendent	1000	1000	500	500

Harrison's Nurseries
J. G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

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